An Introductory Address

Delivered at the Opening of the Winter Session at the Yorkshire College, Leeds, on Oct. 2nd, 1901.

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GENTLEMEN,—I must, in the first place, thank the governing body of the Yorkshire College for having invited me to come among you, for I feel how great is the compliment to have been asked to address you, especially when I remember the distinguished men who are or have been connected with your college and teaching staff and are much better fitted than myself for the task.

In the great educational progress that the nation made during the latter half of the last century it is noticeable that the promotion of general education was more successfully carried out by many of the great provincial cities than in the metropolis. In the case of medical schools the provincial ones naturally could not attain the same reputation as those in London, partly on account of the small numbers attending them and partly from the want of means and facilities for the requisite studies. Time has, however, in this as in many other matters brought about remarkable changes, and the medical schools of London look now with envious eyes at the liberality with which all branches of learning are supported in the great provincial centres of commerce. Science and with it medicine has appealed, and not in vain, to the people of the great northern counties of Yorkshire and Lancashire and nowhere is greater munificence manifested in their support.

The Yorkshire College, originally the Yorkshire College of Science, has for nearly 30 years held a distinguished position among the educational bodies of the kingdom and especially is this the case with the medical school which forms one of its component parts. The Leeds School of Medicine, established 70 years ago, rapidly acquired a high reputation, and when the Yorkshire College was in 1887 admitted to the Victoria University its medical department acquired, as it was fully entitled to, a recognised university standing.

In the history of Leeds, and notably in connexion with its medical school, reference must be made to the remarkable family of the Heys. The first William Hey was active in promoting the foundation of your infirmary in 1767, and for some 30 years was attached to it as surgeon. A friend of the illustrious Priestley, he took the liveliest interest in all scientific and literary progress, and was the first President of the Leeds Literary and Philosophic Society. At the commencement of the last century he gave, as opportunities arose, courses of anatomical instruction in the infirmary on the bodies of executed criminals and his name will ever be honoured as one who greatly improved the art of surgery. His son William succeeded him as surgeon to the infirmary and his grandson William was one of the founders of your medical school; with him were associated Dr. Williamson, remarkable not only for his professional knowledge, but also for his active public life; Dr. Thorp; and Mr. Pridgin Teale, whose son worthily carries on his father's work and who as one of your consulting surgeons it is still your good fortune to have among you.

How wonderful have been the changes since the time when William Hey published his "Practical Observations in Surgery" illustrated with cases (1803). Leeds I find described at that time as a populous market town containing in the year 1801 11,599 houses and 53,162 inhabitants, and it is noted as having flagged footways on both sides of the streets. By the kindness of the town clerk, Mr. Jeeves, I learn that now Leeds contains 94,770 houses and 428,953 inhabitants, more than eight times the number of houses and people it did 100 years ago. Returning to the old description of Leeds, mention is made of its spacious infirmary which, founded some years earlier, was rebuilt by the liberality of the inhabitants of the town in 1786; of three sets of almshouses and a charity school. Leeds was fortunate also in the possession of a free grammar school, an old foundation, due to the pious action of William Sheafield in 1552 and greatly benefited in the following century by John Harrison (1664) and Godfrey Lawson, the Mayor (1692). Possessing this advantage we find that Leeds long ago had its contributors to science and art, for among those educated in the grammar school during the eighteenth century we find Dr. John Berkenhout, a man of surprising industry and an encyclopædic writer, and Benjamin Wilson, the portrait painter, the friend of Hogarth and Zoffany, who was not only a considerable artist, but a man of science as well, obtaining the gold medal of the Royal Society for his researches in chemistry and electricity, and especially for his services in devising improvements in the construction of lightning conductors.

It is difficult for the present generation to bear in mind the enormous changes which have taken place during the last 100 years. Steam and electricity have nearly realised the wonders of Aladdin's lamp, and Leeds has participated to the full in the material and educational progress which the kingdom has enjoyed. Medicine has had its share in this general advance, and greater progress has taken place in all branches of medical knowledge during the last than in all the centuries which preceded it; not only have great improvements been witnessed in the practice of medicine and surgery and in the knowledge of the action of drugs on the system, but the State, recognising the importance of national health, has taken part in developing a new department of medicine—namely, that of preventive medicine and sanitary science.

While fully acknowledging the debt we owe to the founders of medicine it is clear that however excellent the practice of Hippocrates, Galen, Celsus, and their followers may have been it was entirely due to empirical knowledge, the result of the observation and study of clinical symptoms. On them they, and to a still greater extent their followers, founded theories of disease which, like all other theories, were "fond imaginations vainly conceived," and led to advance neither in knowledge nor practice. The art of healing made no progress whatever during the decline of the Roman Empire, and later the Arabians were but plagiarists of the Greeks and, with the exception of Rhazis, added nothing to our medical knowledge. To them belongs the credit of keeping alive the flickering light of medicine during what are spoken of as the dark ages, when knowledge and learning in Western Europe were at a very low ebb, and but for them the writings of the Greeks would have been wholly forgotten. With the revival of learning and the re-introduction of the knowledge of Greek an undue reverence for the masters of antiquity became prevalent. The writings of Galen were supposed to be infallible, and those who ventured to dissent from their absolute truth were regarded by the learned doctors of Paris and London in much the same light as the ecclesiastical courts looked upon heretics. So strong was this feeling that in 1559 my own college refused the fellowship to Dr. Geynes because he ventured to doubt the infallibility of Galen, and about the same time it declined to admit Dr. Hook to the examination for its licenceship because he had the honesty to say that he had not read Galen's works.

With the Renaissance the study of anatomy became general in Italy. Sylvius, Fallopius, Vesalius, and others placed anatomy on a firm basis, and by showing the errors in the anatomical knowledge of the ancients enabled their followers and successors to break through the prison-like bonds in which medical knowledge had been confined. At a somewhat later period Harvey's discovery of the circulation and his methods of experimentation gave an impulse to the study of the functions of organs in the living, out of which physiology, as we now understand the term, arose. We are apt to forget how slow was the acquisition of physiological knowledge, even after Harvey's time; it was not until upwards of 100 years later, when Black had demonstrated the presence of carbonic acid in expired air and Priestley had succeeded in isolating oxygen, that it was possible for real advances to be made in physiology, and consequently little or no progress was made in the practice of medicine from the time of Sydenham until the practice of auscultation was introduced. I do not mean to imply by this that no improvements took place in practice; great advances were made in surgery and some in medical treatment, but our knowledge of the nature and causes of disease did not advance. Jenner, it is true, more than 100 years ago, by keen observation and patient experimentation, made his great discovery, and not only robbed small-pox of half its terrors, but placed in our hands a clue to the nature of infectious diseases which indirectly,

perhaps, but none the less surely, led to the later discoveries which we owe to the genius of Pasteur and Lister.

The late Sir William Roberts in his interesting Harveian Oration (delivered in 1897) remarks that a sharp distinction must be drawn between the science of antiquity and the science of to-day. Their greatest intellects were concerned in metaphysics and literature rather than in systematising and inquiring by way of experiment into the secrets of nature. The ancients, and more especially the Greeks, possessed a large mass of information concerning nature and natural objects, but from want of general principles and coördination failed to systematise the knowledge they possessed.

It is not my intention to attempt to trace the development of our scientific knowledge during the past century or the influence it has had on medicine. The concluding years have been marked by the discovery of a new province of nature and by the rise of a new science—bacteriology, or the study of the nature of micro-organisms and the part they play either for our advantage or disadvantage in the universe. At present we are only on the threshold of their kingdom and the part they play in nature is as yet but imperfectly known. The problems of the causes of our susceptibility or immunity to their attacks have yet to be explained and present vast fields for research and experimentation; as yet we know that certain forms are invariably associated with certain morbid conditions, and we can go a step further and state with confidence that they are the essential causes of those conditions and that without their presence in our bodies we should not manifest the deviations from the normal state which we call disease. The discovery of their presence and the dependence of disordered health on their activity have already necessitated so great a change in our views of disease that it may with truth be said that a new era has already commenced in medicine.

Many whom I now have the honour to address are about to enter my own profession. I shall therefore devote myself to a brief consideration, not of the amount and kind of knowledge that is required for the study and practice of medicine, but rather of the spirit and frame of mind in which you should approach your future work, the methods by which it should be carried out, and the effect which, in my opinion, your work should and will have on your minds and lives.

Medicine embraces so extensive a range of knowledge that, in the words of Dr. Thomas Young, "there is no science which requires so penetrating an intellect, so much talent and genius, so much force of mind, so much acuteness of memory as medicine. For the full attainment of its proper and ultimate object it requires also the possession of stability of judgment, rapidity of decision and immoveable firmness and presence of mind, readiness of recollection, coolness, flexibility of temper, elegance of manners, and a profound knowledge of mankind and the secret recesses of the human heart." Dr. Young has enumerated a most formidable array of requirements for those who look forward to practising the art of healing; it is too much to expect that all these qualities can be united in any of us; it is only a gifted few who can hope to command a portion of such varied qualities. Dr. Young himself does not seem sanguine that many can be found who would meet his requirements and come up to his standard, for he goes on to say: "Our only hope for attaining these qualities is by means of a good education united with opportunities of becoming acquainted with the world and habits of intercourse with society."

You have all received a good general education and are now entering on your special and professional studies; the better and more advanced your general education has been with the greater ease will you become initiated in your new lines of work. It was a great step forwards in the right direction when the various licensing bodies decided that no man should be admitted as a student of medicine without giving evidence of possessing a more or less satisfactory elementary education. I wish that a higher standard of general knowledge could be insisted on and that the entrance to our profession was instituted on a broader basis. The principles of the sciences of physics, chemistry, and biology should be acquired before the five years of professional study are commenced, for they are none too long for affording time in which you may obtain some practical acquaintance with the many special branches into which the progress of our knowledge has necessitated the breaking up of medicine and surgery.

Great difference of opinion exists among those well qualified to judge as to the value of different kinds of knowledge in training and developing the mind. I will not attempt to enter into the question; it is the way in which a subject is taught rather than the subject matter itself which appears to me to be most important. Without impugning the value of science, if properly taught, to boys as a training for the mind I am quite satisfied that a fair acquaintance with the old classical languages Greek and Latin very greatly facilitates your progress in science. The terminology, not only of medicine, but of the sciences with which you have to become familiar—physics, chemistry, biology, anatomy, physiology, pathology—is for the most part derived from Greek or Latin, and if you have not a fair acquaintance with them the terminology you meet with is not only difficult to master but is actually repugnant to many.

Nor should we forget that the professional character is not the only one which those engaged in a profession have to support. You will not always be the doctor; as a companion, friend, and citizen you have other duties to perform and other opportunities of showing that you have not neglected your talents. Our profession has always claimed to be a liberal and learned one; in no way can its status be maintained and raised, if its members cannot hold their own in general society as men of intelligence and culture. Moreover, nothing more increases our capacity for pleasure in our moments of leisure than having an interest and some knowledge of a special subject, be it what it may. Dr. Johnson[1] remarks: "He that enlarges his curiosity after the works of nature demonstrably multiplies his inlets to happiness"; and I believe that no subjects are more calculated to increase our reverence and to elevate our minds than the contemplation of the works of nature and intelligent inquiry into the nature and causes of natural objects. In the words of the Roman poet,

"Jupiter est quodcunque vides, quocunque moveris."—*Lucan.*

It is often said that we are such as education makes us. This is only partly true, for every man is essentially different from every other, so that no training can ever make two men alike in power or thought. Education and the acquirement of knowledge are not synonymous. Ruskin has remarked that "the great leading error of modern times is mistaking erudition for education."[2] In our profession not only the acquirement of knowledge but education is lifelong; we remain students so long as we remain at work, and our self-education terminates only with the cessation of active life, for it is one of the great advantages of your future work that it opens out an infinite field for speculation and thought and ever affords fresh material for research and experiment. In studying the natural sciences there is no danger of falling into the habits of the schoolmen—"who having subtle and strong capacities, abundance of leisure, and but small variety of reading, their minds being shut up in a few authors, as their bodies were in the cells of their monasteries, and thus kept ignorant both of the history of nature and times, they with infinite agitation of wit spun out of a small quantity of matter those laborious webs of learning which are extant in their books"—studying words and not matter which Bacon[3] says is the first distemper of learning. Very different will be your object; you will strive to work out and interpret the action of nature in health and disease; your search will be for facts and for the proof of these facts by way of experiment. "Knowledge is like current coin. A man may have some right to be proud of possessing it if he has worked for the gold of it and stamped it, so that it may be received of all men as true; and be assured that there is no part of the furniture of man's mind which he has a right to exult in but which he has hewn and fashioned for himself."[4] It is not on the mere acquisition of knowledge that we should pride ourselves; the possession of riches which have come to us from others may be very desirable, but they reflect no honour on the holder of them. Any real addition to the accumulated store of knowledge is a benefit to mankind and, however small, possesses more merit than in filling your minds from the general heap. Remember the words of the poet—

"Nec sibi, sed toti genitum se credere mundo."—*Lucan.*

"The real and legitimate goal of the sciences is the endowment of human life with new inventions and riches." Consider for a moment what science has done since Bacon wrote these words, and how marvellously the truth of them has

[1] Rambler, No. 5.
[2] Stones of Venice, Appendix vii.
[3] Novum Organon.
[4] Ruskin: Stones of Venice.

been exemplified in the 281 years which have elapsed since he submitted the "Novum Organon" to King James the First, together with a private letter in which he thus explains the object of his undertaking. "The work in what colours soever it may be set forth is no more but a new logic, teaching to invent and judge by induction, as finding syllogism incompetent for sciences of nature and thereby to make philosophy and sciences both more true and more active." What would be the condition of the world now had the discoveries of science not advanced with greater rapidity than they did in the centuries which preceded Bacon? How much of the advance has been due to his writings and the influence they have had on the world I will not attempt to discuss. Bacon himself was a product of his times and the revolt from the barren sophistry of the schoolmen and the ancient philosophers had set in before he was born, but no one can deny that his writings played an important part in directing the attention of the men of his own time and that immediately following to the fruitful fields of experimental philosophy. Five-and-twenty years after the appearance of the "Novum Organon" several ingenious men interested in the progress of mathematics and natural philosophy agreed to meet once a week to discourse upon subjects connected with those sciences. Four years later some of them having removed from London to Oxford held similar meetings there; the two societies joined and thus was instituted the Royal Society. It redounds to the credit of our profession that so many of the original members were physicians; among the Londoners we find the names of Goddard, Ent, Glisson, and Merrett; among the Oxford members Bathurst, Petty, and Willis. From the first the Royal Society declared the physical sciences and those which are promoted by experiment to be the objects of their attention, and experiment was the method they professed to practise in establishing the truth of their investigations.

The term "science" has been denied by some as applicable to medicine; they contend that it is an art and not a science. Definitions are always difficult and I will not attempt the task. The terms "art" and "science" have, however, been defined as dealing the one exclusively with things as they are in themselves and the other exclusively with things as they affect men. Science studies the relation of things to each other, art only their relation to men. If this definition embraces the truth medicine can claim to be both, for unless we know the real nature of the things we deal with and the relationship in which they stand to each other we cannot hope to apply them rightly. Whatever may be said of medicine in the past, we may now claim that it deals largely with facts and that our art is the application of our knowledge regarding them to the circumstances affecting human life both in health and disease. Your education should be, and will be here, carried out on scientific principles and you will find that the difficulty of arriving at facts in physiology and pathology constitutes the principal difficulty and is the main obstacle to the advance of curative medicine. These branches of knowledge deal with matters which are so much concealed from view, so involved and so disguised and obscured by a number of delicate and variable causes, that it requires the greatest care and judgment to separate the essential from the accidental—the proved from the probable. Modern means and methods of research give us great advantages over our forefathers in these difficult investigations, and the practising doctor is very greatly indebted to those who have devoted their energies and lives to scientific research in these most interesting but most ill-recompensed studies.

It is impossible in these days that any person, however gifted, can be conversant with all the methods of modern research, but he who has gone through some scientific training is placed in a much more favourable position for appreciating the value of the work and reputed discoveries of others than the man who has never received any such training and has spent his time in the acquisition of, I will not say knowledge, but information on certain subjects sufficient to enable him to scramble through his examinations, and has never learnt the difference between a fact scientifically proved and a statement made on insufficient data.

Credulity is not confined to the ignorant—far from it; it is remarkable how many persons of high intelligence and culture are ready, if they have not received some scientific training, to accept unproved statements and believe in them without questioning either their probability or the authority of those who make them. This tendency to unquestioning belief is especially seen in matters pertaining to medicine, for the belief in the heaven-born doctor still lingers even among the educated. The wonders of science are so striking and to them so incomprehensible that they fail to see the differences between the probable and the improbable, the possible and the impossible. In no other way can we account for the popularity of numberless absurdities which have in their day enjoyed public favour and for the countless nostrums which swell the advertisement sheets of our present newspapers. Bishop Berkeley believed in the efficacy of tar-water as a universal panacea. He says: "It is good, not only in fevers, diseases of the lungs, cancers, scrofulas, throat diseases, apoplexies, chronic disorders of all kinds, but also as a general drink for infants. It strengthens their bodies and sharpens their intellects." None of his theological or philosophical writings commanded such numbers of readers as his "Siris," a work published in 1744, and entitled, "A Chain of Philosophical Reflections concerning Tar-water and divers other Subjects connected together and arising from one another." It is not the laity alone who are thus deluded; among many instances I could narrate of members of the profession being thus led astray I will only mention Dr. Hartley, a learned and philosophical physician, who was so convinced of the efficacy of Mrs. Stephen's powder for the cure of gravel and the stone that he succeeded in persuading the Government in 1739 to make up the sum of £5000 which she demanded for the prescription, £1387 only having been raised by private subscription. This valuable remedy is stated to have been composed of egg-shells and snail-shells with the snails in them calcined; ash-keys, hips and haws, swine-cress, and other herbs calcined; and chamomile and other herbs not calcined. By the irony of fate Dr. Hartley himself died from the disease in spite of having taken, it is said, 200 lbs. of the powder. The cures wrought nowadays by faith healing, Christian science, and other delusions are just as real to the uninitiated as is the removal of a tumour or the cure of an ague; their complete ignorance renders them incapable of forming a judgment as to the reality and nature of the conditions confidently asserted to have been cured. Do we not ourselves conduce to this ignorance on the part of the laity when we speak of curing disease? With few exceptions we do not cure the disease any more than we cure a broken leg; we place the leg or the patient into the best circumstances for nature to restore the health of our ailing patient or the bone of the broken leg.

It would far exceed the limits of my ability as well as of my time if I were to attempt to recount the enormous increase in our scientific knowledge which the last century witnessed. Let me remind you in passing of some of the advances which bear more particularly on the practice of medicine. I may instance the knowledge we now possess of the existence of motor centres in the brain. Although the clinical fact had been recognised for centuries that injuries to the brain were followed by loss of power in the limbs, and in some cases by loss of speech, it was not until experimental investigation was scientifically and continuously carried out that we arrived at the knowledge we now possess and became enabled in a limited number of cases to relieve the sufferers by surgical means and in some instances avert death. Here we see an example of the ease with which the relationship between facts may escape observation if not scientifically looked for and experimentally tested, for even the fact that the paralysis of the muscles occurring in hemiplegia was on the opposite side of the body to that on which the brain lesion was situated, although known to Aretæus and rightly explained by him as due to the decussation of the nerves in the spinal cord, had been forgotten and was not generally recognised until comparatively recent times. Again, in palmistry, which was at one time seriously studied by men of intelligence, whilst all sorts of fancies and superstitions were attached to the lines and folds in the hands and wrists and to the shape and form of the fingers, no one, so far as I know, associated clubbing of the finger ends with interference in the circulation nor transverse furrows on the nails with arrest of growth and nutrition.

How great a change has taken place in our views of the functions of organs since we have ascertained that the main organs of secretion, in addition to the functions we have long associated with them, elaborated other secretions which are probably not less necessary for the well-being of the individual than are those with which we had for years been acquainted. Our knowledge of micro-organisms and

the part they play in nature is but of yesterday, but what an amount of light has already been shed on what formerly appeared insoluble in connexion with infectious disease. How vast and interesting a field is thrown open to us by the little we yet know of serum-therapy and the action of the antitoxins in conferring immunity! Is it too much to hope that possessing, as we now believe, a key to much that has hitherto baffled us, we may in the near future make such progress in arresting or destroying disease that the advance during the nineteenth century may seem to those that follow us almost as slow and halting as we consider that which took place during the seventeenth and eighteenth centuries? May we not look with some confidence to the present century seeing cholera, plague, and malaria and other forms of fever, if not abolished, rendered comparatively innocuous? I am tempted to apply to our present position the words of Lucan, beautifully paraphrased by the late Dean Stanley—

> "Never in earlier days our hearts to cheer
> Have such bright gifts of Heaven been brought so near,
> Nor ever has been kept the aspiring soul
> By space so short from so great a goal."

How is this goal to be attained? By patient and honest work, seeking the truth and not being contented until the truth can be plainly and palpably demonstrated. It is not given to everyone to make great discoveries, but we may all help in the work and bring, if we observe facts correctly, a fragment of stone or a grain of sand to assist in building the temple of knowledge.

I have now endeavoured briefly and very imperfectly to bring before you the manner in which you should approach the study of medicine. The time has passed when experience was the sole guide and clinical symptoms the sole means we possessed for recognising disease and judging of the state of our patients. Do not misunderstand me and conclude that experience and observation are not needed now; no amount of chemical or physiological knowledge will enable you to recognise disease or to treat satisfactorily those under your care. Observation and experience are as valuable and necessary as ever, but much more is required, for unless you approach your clinical work with minds already trained in scientific methods you will fail to appreciate and interpret aright the difficulties you will then encounter. You will find hereafter that the cases which cause you the greatest anxiety are those in which you are uncertain of the conditions with which you have to deal and where you cannot foresee the probable outcome of the symptoms before you. Recent progress enables us to stand on much firmer ground than we did but a few years ago. Bacteriology enables us to distinguish between certain forms of fever; and advances in pathological histology render it possible to discriminate innocent from malignant growths; by the aid of the Roentgen rays foreign bodies can be seen and located within us, whilst more exact information can be obtained in the diseases and injuries of joints and the condition of fractures; and we may hope that before long the wonderful x rays may reveal with greater certainty than at present changes in the tissues of our organs. There is no need for me to multiply instances; in a variety of ways we reap advantages from the progress of the other sciences and hopefully adopt them as a means for improving our art.

Let me, in conclusion, turn to the effect which the study of medicine has on those who pursue it. You must have already gathered from the tenor of my remarks that science appears to me to be the most ennobling of all pursuits; and as I claim medicine as a science it follows that it shares, and I believe more highly than any of the other branches, in this advantage. The old reproach, "Tres medici duo athei," is not, and never was, true, and I believe that among no class is true reverence for the Creator more strongly felt than by the followers of medicine. Unorthodox they have been and perhaps are. The anathemas of the Church which of old were so often directed against science arose from the hatred which the Church had to the spirit of inquiry, which is one and perhaps the most potent cause which leads men to enter our profession. The errors in the accepted beliefs of the Church soon became apparent to the students of the natural sciences and led them to regard with suspicion the truth of the dogmas and validity of the creeds promulgated by conferences of theologians who, however learned, were but fallible men. Without scepticism there can be no progress, but the charge that scientists were godless arose from the intolerance and bigotry of ecclesiastics.

> "There lies more faith in honest doubt,
> Believe me, than in half the creeds."

It is needless in this assembly to refute the calumny that our education blunts our feelings and renders us callous to the sufferings of men and animals. The experience of the whole world disproves it; this charge was never made until recently and springs, in my opinion, from the same spirit of antagonism to inquiry and scientific knowledge which dominated the minds of the Papal inquisitors. The sentimentalist, ignorant alike of the methods and purposes of experimental investigation, allows his feelings to be played upon and his judgment perverted by the misrepresentations of a few who, I cannot help thinking, have other and more material reasons than either the sufferings of animals or the alleged evil effects of experimentation on those who practise it for the agitation they so noisily strive to maintain against physiological and pathological research. Our training produces an opposite effect; the desire to be useful to our fellow-creatures is next to the spirit of inquiry, if, indeed, it be second to that—the motive which leads many to our ranks. By general consent wherever sickness and suffering are found and however little may be the pecuniary reward we are found ready to succour to the best of our ability those in need of our aid. The battle-fields of our armies and the cholera and plague-stricken districts of our empire alike bear witness that we are not forgetful of Plato's definition of the duty of man: "Wherever his post is, whether selected by himself or assigned to him by his commander, there it is his duty to stand fast in the hour of danger, recking nothing of death or anything else except dishonour."

Before I conclude let me add a few words of encouragement to those who are to-day entering on a new life. You are commencing a period of keen competition, first among your fellow-students and subsequently in the world. Remember that you cannot all be prizemen; all are not equally endowed by nature, but all can make use of their gifts to the best purpose. I would remind you of the words of Marcus Aurelius, the last of the Stoics: "You have no special keenness of wit; so be it; yet there are many other qualities of which you cannot say you have no gifts that way. Do but practise them, they are wholly in your power; be sincere, dignified, industrious, serious, not too critical nor exacting, but considerate and frank. See how many good qualities you might exhibit for which you cannot plead natural incapacity or unfitness and how you fail to rise to your opportunities." Your opportunities here will be great, and I may venture to assure you that if you make use of them you will not fail, you will have fitted yourselves for the duties of life, and will not in the future have to repine over wasted years. Your success depends upon yourselves, upon your skill, character, and conduct; so employ your time now that at the close of your career you may be able to say, as did Percival Pott, one of the great surgeons of my hospital, "My lamp is nearly extinguished, I hope that it has burnt for the good of others."

An Introductory Address

ON

OCCULTISM AND QUACKERY.

Delivered at the Opening of the Winter Session at St. Mary's Hospital on Oct. 1st, 1901,

BY WILLIAM HILL, B.Sc., M.D. LOND.,

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GENTLEMEN,—We are confronted to-day with the spectacle of a number of students entering on an expensive course of study extending over at least five years in the hope of eventually joining, and making a competence in, the ranks of a profession which is already overcrowded. The total number of entrants to-day at the various medical schools in the kingdom we may put down at nearly 2000, and one may well pause to inquire whether these women and young men are wise, and whether it is really worth while going to the trouble and expense of a medical education at all. Why not start off and practise on the credulity of the public without let or hindrance by law? We live in an age when there is not only a large survival from the dark ages of superstition and a belief in occultism and in quackery of all kinds in medicine, but

there is positively a revival of the most remarkable character of an emotional form of occultism, a jumble of pseudo-science and irreligion. I allude to the various forms of faith-healing of which Christian Science is a type. There is, of course, money in the movement. In America "Divine healing" exhibits its success in one notable instance in the establishment of a school and college, a bank, a land and investment association, a printing and publishing office, and sundry "Divine healing" homes, and this prosperity is now to be extended by the foundation of a city or colony of converts who shall be united by the common bond of faith in Divine healing as transmitted in the personal power of their leader. The official organ of this movement announces that the personification of their faith "makes her religion a business and conducts herself upon sound business principles," and their leader publicly boasts of his vast financial returns. With emphatic protest on the part of each that he alone holds the key to salvation, and that his system is quite original and unlike any other, comes the procession of "metaphysical healer and mind-curist," "viticulturist and magnetic healer," "astrological health guide and phrenopathist," "medical clairvoyant," "esoteric vibrationist," "psychic scientist," and "mesmeric occultist." Some use or abuse the manipulation of hypnotism; others claim the power to concentrate the magnetism of the air and to excite the vital fluids by arousing the proper mental vibrations, or by some equally lucid and demonstrable procedure; some advertise magnetic cups, and positive and negative powders, and "absent treatment" by outputs of "psychic force," and countless other imposing devices. But what is especially interesting, they offer diplomas and degrees after a three weeks' course of study or merely after the reading of a book. You remember that Carlyle in alluding to the number of millions inhabiting the globe remarked without any special provocation that they were "mostly fools." I think to-day he would have added a condemnatory adjective.

"A series of superstitions and extravagant systems are conspicuous in the antecedents and bypaths of the history of medicine and are related to it much as astrology is to astronomy, or alchemy to chemistry; and, because medicine in part remains, and to previous generations was conspicuously an empirical art rather than a science, it offers great opportunity for practical error and misapplied partial knowledge. The legitimate recognition of the importance of mental conditions in health and disease is one of the results of the union of modern psychology and modern medicine. An exaggerated and extravagant, as well as pretentious and illogical, over-statement and mis-statement of this principle may properly be considered as *occult*."[1]

As I am addressing a mixed audience, many of whom have had no medical training, it may serve some useful purpose if I review simply and briefly the evolution and growth of medicine in early days, with special reference to the occult factor in ancient and modern times.

On examining the literature of ancient Egypt, Assyria, Greece, and Rome, even by the aid of English translations, one soon realises the obscurity in which the practice of medicine was enshrouded before the time of Hippocrates—that is, about 400 B.C.; but in dealing with the medical art as taught and practised by him we are dealing with extensive, systematic, and authentic records—records recorded mostly by himself. Medicine anterior to the "father of medicine" is not only, historically speaking, enveloped in mystery, but we find that the medicine-man revelled in mystery and his practice bristled with occultism, while, on the other hand, exponents of occultism found a happy hunting-ground in the field of medicine.

The evolution of the medical art is probably contemporaneous with the development of the higher anthropomorphic attributes in man. It cannot, of course, be doubted that instinct in the lower animals leads them to abstain from, or to safeguard themselves against, what might prove hurtful to their health, and instinct also leads them to seek out and to adopt what is likely to be beneficial. In a sense, therefore, we may allow that a kind of *preventive* medicine was in force previous to the evolution of man, but it may be safely surmised that *curative* medicine was not practised till man attained a certain degree of intellectuality and civilisation. Though the domestic animals in many instances show a marked appreciation of the medical and surgical aid they occasionally receive at the hands of man, we seek in vain for any general evidence of initiative on their part in the practice of either medicine or surgery. An animal stricken with disease usually hides away in the nearest corner, and if the disease be a mortal one dies with more or less resignation. In some species his fellows, recognising his plight, will decide to put the victim out of his pain by a somewhat crude attempt at euthanasia. Preventive medicine in man, we may safely assume, therefore, preceded the evolution of the curative art and was coeval with the higher development of the reasoning faculty.

Medicine as a *profession* is probably older than the Church and the civil law—it certainly is older in superstitions, traditions, and ethics. The early tendency to the formation of associations and societies which is such a feature of to-day is found in the Asclepiadæ of Greece, the priest-doctors of ancient Egypt, the Lamas of Central Asia, the Vaidhyas of India, the Druids of ancient Britain, and the fraternities of the Middle Ages. In very early times, however, the profession of medicine was rarely practised alone and was usually combined with the priesthood; this combination was even continued so recently as the early and middle ages of Christendom, where the industrious monks were not only largely concerned with the production, maintenance, and dissemination of literature and science, but included within their ranks the doctors. The medical missionaries of to-day are the modern analogues of the priest-physician of old. They have the advantage, however, of carrying to distant climes an excellent system of ethics and a competent knowledge of the science and art of medicine, whereas the very mythological character of the ancient religions were bound to tincture the medicine of the superstitious doctor with that belief in the occult and mysterious which has always retarded the progress of medicine and of all knowledge. The general belief in the occult which is still fostered in most of us by the teachings of the nursery proves a powerful weapon now as formerly in the hands of the charlatan, the quack, the fortune-teller, the spiritualist, and the faith-healer—of all who make it their business to prey on a credulous public.

In the leading articles which will appear in many of the daily papers to-morrow you will probably find that practitioners of medicine are alluded to as "followers of Æsculapius" or as "students of the Æsculapian art"; these, and expressions of a similar kind, will naturally suggest to you that Æsculapius was the first personage who made any great reputation as a physician. Now, whether Æsculapius was a real man or merely a god of the usual mythological character is not quite clear. Hippocrates claimed to be the eighteenth in descent from Æsculapius, and this would seem to settle the point that he was really a man, but you must bear in mind that 2000 years before the Christian era the College of Heralds thought nothing of tracing a man's descent back to one of the gods, especially if his liberality in the matter of fees appeared to warrant such a pedigree. Not only is it not certain whether Æsculapius was a mythological personage from the start, or whether he was really a medical man and afterwards deified by the Greeks (who represented him as the son of Apollo), but there is equal uncertainty as to his nationality. He has been claimed as an Egyptian by birth, and he may well have been so, as in those days the Egyptians were a highly-learned nation, and Greece was early colonised by them, a compliment which the Greeks returned later. Certain it is, however, that the more intimate descendants of Æsculapius formed themselves into a priesthood, later known as the Asclepiadæ, and founded temples which had a three-fold character—they were at once places of worship, hospitals, and medical schools. Under their influence medicine became a regular profession, but in these early times internal medicine seems to have been kept distinct from surgery, the latter being usually combined with some trade, a condition which obtained even down to the last century, and the dissociation of surgery from the art of the priest-doctor may account for the undoubted fact that there has always been less occultism associated with surgery than with medicine. It is true that the dissociation of medicine and surgery was not universal, for it is alleged that Æsculapius had two sons who greatly distinguished themselves as physicians and surgeons at the siege of Troy in 1814 B.C. Whether these persons really acted as general practitioners or not is immaterial—there was no "double qualification" necessary in those days; but there is very clear evidence that many centuries before Hippocrates (who practised about 400 B.C.) the division of labour was so great that specialism was carried to the most ridiculous extremes by the Egyptians.

[1] Jastrow: "Fact and Fable in Psychology." Macmillan, 1901.

The priest-doctor was only allowed by law to practise one speciality. How many specialities the human body was then divided into I am not prepared to say, but every organ and every system apparently had its special exponent. We learn that those who treated fractured bones were not permitted to deal with diseases of the joints other than fractures; physicians for stomach complaints were by law debarred from treating diseases of the heart; again, a surgeon could not treat a patient with disease of the intestines, though he should have a first-rate knowledge of internal complaints. Fancy how galling it must have been to the surgeons of those days to have been obliged by law to hand over their cases of appendicitis to the physician whose speciality was the right iliac fossa. Again, picture an otologist who was not allowed under any pretext to insert his finger into the naso-pharynx of a deaf child—I am sure you cannot imagine what his feelings must have been. It is satisfactory to learn, however, that these specialists had to go through a regular medical curriculum which was not confined to their own special line of business; and the most gifted senior students were sent from Alexandria on a post-graduate trip to Heliopolis and other polyclinics in the same way that intending specialists go to Vienna and other places to-day. The medical men of Alexandria lived at Thebes in a quarter of their own just as consultants do here. Another pleasing feature, which has unfortunately no counterpart now, was that there would appear to have been actually enough staff appointments to go round, for each medical man, we learn, was attached to a hospital. When medical aid was required in private practice the messenger hastened not to the Harley-street area of Thebes where the specialists resided with their families, but hied him to the nearest hospital where the "Principal of the medical staff of the Sanctuary," as he was called, questioned the messenger as to the symptoms from which the patient was suffering, and he selected the man he thought entitled to the case. You may smile at this method of making a diagnosis without examining or seeing the patient and from a necessarily imperfect report of the symptoms, but it finds a parallel in the extraordinary and illogical mental attitude of so many of the laity at the present day. Laymen of a certain type see nothing ridiculous in undertaking without any medical knowledge to make a diagnosis of their own case and they either consult a quack institute by letter or else seek advice through the correspondence column of a newspaper, or prescribe for themselves a proprietary or "patent medicine" to be obtained at the nearest drug stores, "pouring drugs of which they know little into bodies of which they know less." Diagnosis is *the* part of medicine where accuracy can least be dispensed with—can least be arrived at in a haphazard and inexact way. Given an accurate diagnosis it is comparatively easy to get *some* idea of treatment from books, but treatment not based on reasoned diagnosis is valueless and sometimes far from harmless. There is an impression to-day—an impression often enough wrong, but one which we have little concern in correcting—that gratuitous medical services are rarely worth much, but the Alexandrian doctors took no fees from the patient. Their temples were maintained by a regular share of the State revenues, by gifts from kings, and by voluntary contributions from the laity. How Utopian this State-supported hospital system appears to us. Fancy St. Mary's Hospital receiving from the Revenue, instead of contributing to it!

I have remarked already that before the time of Hippocrates much of the materia medica and therapeutics of the priest-doctors was kept secret. This, in addition to curtailing our knowledge of their practice, must have not only retarded advance but encouraged the pernicious idea of mystery with which medicine was regarded by the laity. We can excuse this belief in a secret remedy in those who lived 4000 years ago when superstition was everywhere because medicine was practised by those who were also the exponents of a ridiculous theology, and when belief in the occult was universal, but it is, indeed, lamentable to see the most palpable forms of heterodoxy still receiving substantial support from all sorts and conditions of men, from the lord in his castle to the workman in his cottage.

Coming now to the earlier periods of Jewish history we find evidence that sanitary science and preventive medicine were in a more advanced state than the study and curative treatment of disease. The late Professor Sharpey used to delight in calling the attention of his students to the admirable system of public medicine enforced by that great and wise man in Israel, whom he alluded to as his "excellent co-worker in the field of science," Moses. Moses was at once his own Minister of State for public medicine and chief medical officer of health, and doubtless he was assisted by an efficient staff of subordinates. We also find Moses figuring on emergency as a physician, but just as the mythical Æsculapius was always represented in statuary and carving as armed with a stick, around which a serpent was entwined, so when Moses was working miracles or practising faith-healing *en masse* in the wilderness we find him raising aloft the serpent, the symbol of office of the priest-physician. *A propos* of this, the belief in the miraculous power of rulers had its counterpart in modern times, for English sovereigns from the days of Edward the Confessor down to the time of Queen Anne regularly "touched" for the cure of the king's evil. The affair, however, does not appear to have always been a very disinterested one, as the patient's pocket was touched as well as his person. It is recorded that Charles the Second, of impious memory, made as much as £10,000 in one year out of this ridiculous practice. It is no wonder, then, that in those days every self-respecting practitioner with any confidence in himself laid claim to the performance of at least an occasional miracle, and this claim was often made with perfect sincerity. Our knowledge that the undoubted influence of the mind on the body and the influence of suggestion and expectant attention applies only to subjective states and functional disease enables us to understand why so many people in former days, on the principle that seeing is believing, were able to testify to miraculous cures within their own experience. It never occurred to them that there was an essential difference between functional and organic disease.

In the Bible the physician is with great frequency alluded to in a symbolic sense, but apart from these allusions there are distinct references to men who actually practised the art of medicine. Moses refers to the preparation of the sacred oil "after the apothecary's art," and Job, who may be excused for a certain amount of pessimism, spoke of his councillors as "physicians of no value." The Biblical references as a whole are nevertheless decidedly complimentary to the profession and in one instance embarrassingly so, for we are told of King Asa that when his disease was exceeding great he "sought not the Lord but his physicians."

The leading principle of the stupid homœopathy revived a hundred years ago, that "like cures like," was a mere reproduction of a very ancient medical aphorism. From the alleged fact that worms come out of the noses of sheep suffering from "staggers" or "turning fits" it was concluded that the larvæ of worms coming from the sheep's nose would be an effectual remedy in epilepsy in man, and as early as B.C. 560 Trallianus tells us that at two distinct utterances of the Oracle of Delphi these worms were recommended to be used by no less a patient than Democrates of Athens who suffered from epilepsy. You will be interested to know how the famous orator "used" the maggots. Like a sensible man, he did not eat them *au naturel* nor did he swallow them disguised as a bolus, but, being doubtless an unquestioning believer in amulets, he merely put the worms in a bag which he tied round his neck. Cure was, of course, unlikely. At the present day the homœopathic system is, medically speaking, exploded and discredited, but as a means of attracting the more credulous of the public its power is, if diminished, still considerable.

Passing now to Hippocrates, we find that he lived in the best and most prosperous period of Greek ascendancy. He was born in 460 B.C. and was the contemporary of such learned men as Socrates, Plato, Xenophon, Pindar, Thucydides, Æschylus, Euripides, Sophocles, Aristophanes, and Herodotus. He was a voluminous writer and codified the medical knowledge and traditions which had been handed down by the Asclepiads; he was not really the "father of medicine," as he is usually styled, but he was evidently, intellectually and practically, head and shoulders above his predecessors. One of his aphorisms, "*Vita brevis ars longa*," has passed into the ordinary speech and literature of all nations. I cannot better indicate what manner of man he was than by reading you the Oath of Hippocrates, and it will perhaps be more convenient to all present, not excluding myself, if I give it to you in English rather than at first hand in the language in which it was spoken and recorded.

I swear by Apollo the physician, by Æsculapius, by his daughters Hygeia and Panacea, and by all the gods and goddesses, that to the best of my power and judgment I will faithfully observe this oath and

obligation. The master that has instructed me in the art I will esteem as my parent, and supply, as occasion may require, with the comforts or necessaries of life. His children I will regard as my own brothers; and if they desire to learn I will instruct them in the same art without any reward or obligations. The precepts, the explanations, or whatever else belongs to the art, I will communicate to my own children, to the children of my master, to such other pupils as have subscribed to the physician's oath, and to no other persons. My patients shall be treated by me to the best of my power and judgment in the most salutary manner, without any injury or violence; I will neither be prevailed upon by any other to administer pernicious physic, or to be the author of such advice myself. Cutting for the stone I will not meddle with, but leave it to the operators in that way. To whatsoever house I am sent for I will always make the patient's good my principal aim, avoiding as much as possible all voluntary injury and corruption. And whatever I hear or see in the course of a cure, or otherwise, relating to the affairs of life, nobody shall ever know it, for it ought to remain a secret. May I be prosperous in life and business and for ever honoured and esteemed by all men as I observe this solemn oath; and may the reverse of all this be my portion if I violate it and forswear myself.

You will observe the obligation under which he felt himself to be to his teacher—he even promised to provide him if necessary with the comforts of life; the sentiment is so admirable that on behalf of my colleagues and myself I would ask those of you who are prepared to take the Oath of Hippocrates to remember the professional support which this master in medicine swore to render to his former teacher. Again, he had some sense of professional etiquette. Although he makes no allusion to what he would do in intussusception, yet he is prepared to leave a small field absolutely in the hands of the surgeons; cutting for stone he will even "not meddle with, but will leave it to the operators in that way." There is, however, here a covert suggestion of "meddlesome" surgery. The sentence in which he promises professional secrecy in reference to whatever he "might hear or see in the course of a cure or otherwise" is specially interesting as showing that he set out as no charlatan promising to cure everybody. He clearly anticipated that some of his results, like ours of to-day, would be "otherwise"; in fact, in spite of his pre-eminence over his fellows, his knowledge of anatomy and physiology was so crude and his pathology so humorous that we might wonder that the founder of the Humoral System of pathology had any results which were not more or less "otherwise." I will not detain you with an account of the erroneous notions which Hippocrates held in normal and morbid anatomy, but the explanation is simple: owing to extreme reverence which the Greeks had for the dead he was absolutely debarred from learning anything by anatomical dissections and post-mortem examinations. His knowledge of anatomy in health and disease was derived from the writings of those of his predecessors who had occasionally availed themselves of opportunities for actual dissection. His acumen, however, as a clinical observer of the course and symptoms of disease was of a very high order. He founded his views on facts when facts were at hand, and so far his observations on diet, on climate, on expectant treatment, and on the *vis medicatrix naturæ* combined with good nursing, are not unworthy of perusal to-day; but it was when, relying on the records of others, he dealt with what he *supposed* to be facts, that he gave way to that free play of the imagination which resulted in his system of humoral pathology. Whilst essentially a clinical observer Hippocrates seems to have employed a number of drugs in use at the present day—and his materia medica was extensive if peculiar. He frequently employed venesection. He was a believer in the theory of opposites which shows that he was no homœopathist. Hippocrates, however, with all his knowledge had his superstitions—he believed in "critical days."

Herodicus, a contemporary of Hippocrates, was the first to adopt gymnastic exercises in the treatment and cure of disease, and we have here the beginning of movement cures and similar therapeutic measures which have attained great popularity and some distinct success at the present day. These, like everything else, have been outrageously quacked; and as an instance I may mention the case of a patient of mine who was induced by one of her titled and fashionable friends to go to a Swedish masseur who held a diploma in his own country; and this charlatan promised to "disperse" a sebaceous cyst of the scalp by a course of movement treatment. I think that you will agree with me that if he had succeeded in doing so he would have well earned the mere matter of £100 which was the fee asked. A suggestion that payment should be made on dispersal of the tumour, and not in advance, led to the abandonment of this interesting course of treatment.

About 300 B.C. Philenus founded the School of "Empirics"; anatomy and physiology were dismissed as useless, and in the treatment of disease experience and observation alone were depended upon. The Empirics rejected the doctrine of occult causes of disease as taught by Hippocrates, though this doctrine was adopted later by the Dogmatics. Aristotle, who was born in 384 B.C., began his medical studies well—i.e., by actual dissections on the cadaver and on the lower animals, and he was really the founder of comparative anatomy. As every schoolboy knows, he later elaborated a system of philosophy, which was plausible, comprehensive, and mostly absurd; by amalgamating his philosophy with the medical teaching of Hippocrates he not only succeeded in founding the School of Dogmatics, but added materially to the retardation of medical progress during the next 1000 years.

Soon after the Christian era the more prominent physicians of all sects and factions came together in an agreement that no one sect contained all the truth. Under the title of the Eclectic School they claimed to select all that was good and useful and to reject all else. I will not weary you with the names of those who brought this school into prominence, but I must mention one of them—Cleombrotus—for he holds a record, which, I believe, stands to-day: he received a fee of 100 talents, a matter of £15,000, for curing King Antiochus of a dangerous disorder. Apart from this the Eclectics seem to have been a failure.

When one considers the high position attained by literature, the lofty standard reached in poetry and the drama, and the super-excellence of the Greeks in sculpture, painting, and architecture, it is a matter for much wonder that such slow progress was made in medical science. Even in anatomy, where there was a concrete basis and well-defined sphere of research, the advance of knowledge was tardy; the historians gravely record how this or that membrane was detected, or when certain bones were distinguished and named, just as the astronomer tells us that in this or that year a planet was discovered. Physiology and chemistry as exact sciences could scarcely claim to exist.

Turning from the Greeks to the Romans, the first Latin writer of any celebrity was Cornelius Celsus, who flourished about the commencement of the Christian era; he has given us a valuable summary of the medical practice of his time. There seems some doubt, however, as to whether he ever really practised the medical art. It was not until the time of Claudius Galen (born A.D. 131) that medicine arrived at the stage of puberty. His researches on anatomy, physiology, pathology, chemistry, and, in fact, every department of medicine, were published in no less than 500 treatises, only some of which are now extant. In anatomy he was the first to describe the popliteus, the platysma myoides, the sterno-hyoid, and many other muscles. He seems, however, to have been much better up in anatomy than physiology, for we find him attributing the essential phenomena of life to certain "occult forces" inherent in the several organs; these forces, the vital, the animal, and the natural, he located in the heart, brain, and liver respectively. Galen's leading dictum was that "health is maintained by supplying similar with similar, whilst disease is overcome by opposing contraries to contraries." The plan of treatment in Galen's time mostly consisted in giving particular remedies for particular diseases—specific treatment, in fact. Even Galen, you see, could not get away entirely from a system, and when he and his contemporaries speak of a rational system of therapeutics they do not attach the same interpretation to the word "rational" that we due to-day; they believed in specifics yet they had little knowledge of those diseases which are now known to be really due to specific causes—e.g., those of microbic origin. To-day a large number of even the educated public take much the same view that diseases are little more than ideas, occult forces in various organs, diagnosable without skill, and readily "dispersed" by advertised specifics or by various occult methods.

Time does not admit of my tracing the vicissitudes of medicine through the dark ages. It reached its lowest ebb in the seventh century when Mahomedanism invaded Europe. In mediæval times necromancy was rampant, and even Roger Bacon, who flourished in the twelfth century and is spoken of as the founder of experimental science, could not shake off the illusions of astrology and alchemy. The sixteenth century was the age of epidemics and, of course, of quacks, for it is in periods of emotional excitement that people will, literally and metaphorically, swallow anything. In more recent times waves of occultism have been marked by the

appearance of mesmerism, homœopathy, spiritualism, theosophy, and, lastly, various forms of faith-healing, with Christian Science at the summit of this bad eminence.

Christian Science cannot be dismissed without some examination in one of its aspects. I remember a recent conversation with an earnest believer in faith-healing who was convinced that his family when sick would be much better treated and would get much better results from his own peculiar system of therapeutics than from ordinary medical practice; and after listening patiently to my arguments, which were directed to demonstrate that a belief in such a system was a return to the occultism of mediæval times, he asked me the very pertinent question, whether I and the bulk of medical men did not encourage, or at all events countenance, not only prayers *for* the sick but prayers *by* the sick, as a real and material aid in the treatment of disease; and when I replied that *in a sense* it might be so he demanded that I should explain how a belief in the possible interposition of God in altering the course of disease could be regarded as anything less than a belief in the miraculous and the occult—a belief in something just as miraculous as would be the altering of the stars in their courses. He proceeded to condemn medical men as themselves believing in and countenancing the occult in medicine whilst they reprobated the doctrine of occultism as practised by others outside their own narrow ring, and he pointed out that until medical men had extracted the beam from their own eye they were scarcely competent to deal with the obliquity of vision of those who were in competition with them. We must face an argument of this sort—it is rather an accusation than an argument—which is freely levelled against us when we denounce the fads of the present day which come within the province of the miraculous and occult. The question is, Do medical men believe in prayer as a therapeutic agent? If those in this room who believed generally in prayer were asked to stand up it is probable that there would not be many, if any, left seated. The moral and intellectual gain which accrues from that earnest introspective meditation and examination which is an essential process in efficient prayer can be productive of nothing but good if rightly exercised. If asked, however, whether you believed in the efficiency of prayer in altering for the better the progress of real bodily disease it is probable that in this mixed audience many would prefer not to give a plain answer of yes or no. We all know what our mothers would reply, or would have replied to this question, for did they not in their simple faith instil into us the efficacy of prayer under all circumstances? This doctrine, though admirable in the cramped environment of the nursery, has, I imagine, appeared to require modification with the expansion of our physical and mental horizon. The specific question is, Can a *supernatural* effect result from prayer under any circumstances in the course of sickness? If we are unable to face this question we are unable to face the Christian Scientists and faith-healers. The question has been put to me again and again in discussing this subject during the last 12 months. My answer is this, that so far as I know, prayer as an agent in the treatment of organic disease is neither taught nor even alluded to in the teaching of medical men of the present day. It is not mentioned in our treatises on medicine, it is not alluded to in the class-room or lecture theatre, it has no medical place in the wards. It is quite unlikely that there would be a conspiracy of silence on such an important matter, for if we believed even in the occasional possibility of Divine intervention, and were treating a case of, say, tuberculosis of the larynx, it would be the first therapeutic agent adopted rather than the last. I know that some timid folk will think I am treading on dangerous ground in raising the question of what is the truth in this matter. Divine healing to-day is neither taught by, nor known to, the orthodox medical profession. I am not aware that it is an article of faith absolutely demanded by the Church, though it is doubtless held as a "pious opinion," and possibly taught, in some quarters by worthy persons; but it is an opinion which the bulk of the orthodox medical profession could only accept after overwhelming evidence. Is there any evidence? The fact is, religion and theology have nothing to do with medicine, and that is the strongest and shortest answer to the Christian Scientists. One is asked why a large number of medical men go yearly to St. Paul's under the auspices of the Guild of St. Luke the Physician. They go, of course, because they belong to the Christian faith, but their going does not imply any narrow theology. Theology has no more to do with medical science than it has to do with mathematics, or, to put the matter more concretely, it has no more to do with a vesical calculus than it has to do with the differential calculus.

We must allow in the most generous manner the enormous indebtedness of medicine in the past to the various religious orders which fostered it, but the partnership has persistently suffered from the defects of its qualities; there has always been, both in modern times and in the age of paganism, too much of the superstitious encumbrances of religion engrafted on medicine; medicine has been inoculated and impregnated with the least defensible pretensions of religion. The calling of the priest and the medical man are now usually practised separately, and rightly so, as they are essentially distinct, and we must now admit unreservedly that all physical science, and therefore medical science, has, from a *practical* point of view, nothing whatever to do with theological beliefs. I know that I may be thought to be going beyond the teaching of Herbert Spencer, who has devoted some space in his "First Principles" to the examination of the question whether there is not some common region in knowledge where science and religion meet; but I am afraid that you will find little comfort or illumination from Spencer's conclusion, which is that ultimate religious ideas and ultimate scientific ideas, if pursued far enough, will be found to arrive at the stage where the most certain of all facts will be that "the Power which the universe manifests to us is inscrutable"; in other words, that the researches of science and the speculations of religion ultimately lead to a veritable *terra incognita* where is nothing but the Unknown and the Unknowable. Lest you may think that I am retailing doctrines dangerous to young men who have just left a public school which should render those subscribing to them outside the pale of the Christian Church, let me read you an extract from a lecture delivered some years ago on behalf of the Christian Evidence Society by a former Regius Professor of Divinity at Oxford, Dr. Payne Smith. Speaking of the then current antagonism between religion and science he says:—

> And first, revelation has nothing to do with our physical state. Reason is quite sufficient to teach us all those sanitary laws by which our bodies will be maintained in healthful vigour. If the Bible condemns drunkenness, gluttony, and the like it does so not for sanitary reasons but for moral reasons because they are sins. So revelation has nothing to do with our mental powers; whatever we can attain to by our mental powers we are to attain by them. Physical and metaphysical science alike lie remote from the object matter of revelation. Because God has, in the Bible, given us revelation in an informal way, in order, perhaps, to commend it to our entire nature, people often forget that its proper object matter is simply the moral relation in which man stands to God, especially with reference to a future state of being. Religious men forget this, they often take up an antagonistic position to science, and try to make out systems of geology and astronomy and anthropology from the Bible, and by these judge all that scientific men say. Really the Bible never gives us any scientific knowledge in a scientific way. If it did it would be leaving its own proper domain.

If time had permitted I should have liked to have dealt with some forms of present-day quackery—e.g., bogus institutes for the deaf and the sale of expensive ear-drums and other forms of aural humbug which I have had special opportunities of becoming acquainted with.

I may be expected to draw some moral from this necessarily imperfect sketch relating mostly to the seamy side of medicine. Will the spread of education render the general mass of the people, especially those particularised by Carlyle, more capable of distinguishing between fact and fable in psychology? Will it render them less gullible and less liable to be led away by waves of emotional heterodoxy? I confess that I am not very sanguine on this point, for what are termed the educated classes are amongst the worst offenders. Will the educating of the youth of the country in the elementary facts of physiology, in the laws of health, and in the principles of observation and reasoning aid us much? Again I am not sure, for we know the proverbial danger of a little knowledge. I think that something, however, can be done by the healthy and active influence of members of the medical profession working individually and seizing every opportunity of instructing individual members of the laity on points concerning which they are liable to form and hold false views. To take a specific example, small-pox is now very much in the air. How shall we overcome the prejudices of that well-meaning but dangerous person the "conscientious objector" to vaccination? We must first make ourselves acquainted, not only with the history and facts of the subject, but we must carefully study the standpoint of

our opponent, and then by friendly argument, by the loan of literature, and such means, endeavour to induce him to look at the matter, even if only for a few minutes, from our point of view. These educational means, which have been unostentatiously worked in the past, require to be pushed with extra vigour by all of us in the future if we are to make further headway against heterodoxy, quackery, and occultism.

ABSTRACT OF

An Address

ON

THE PRESENT TREATMENT OF INOPERABLE CANCER.

Delivered before the West London Medico-Chirurgical Society on Oct. 4th, at the Opening of the Session 1901-1902,

BY ALFRED COOPER, F.R.C.S. ENG.,
PRESIDENT OF THE SOCIETY.

GENTLEMEN,—The honour which you have done me by electing me as your president is one of the greatest honours which I have yet received, for, although the West London Medico-Chirurgical Society is young in years, it is, I believe, by far the most active in its work and growth of all the other medical societies in London. On taking the chair for the first time I have thought that I cannot do better than draw your attention to a consideration of the present treatment of inoperable cancer, a disease which has attacked the highest in the land and which is certainly becoming more prevalent.

It is unnecessary for me as a surgeon to state that in cases where the disease together with the enlarged lymphatic glands are in such a position that their removal can be effected without too great a risk to life, this should be done thoroughly and at once, and that no valuable time should be wasted in trying any suggested cancer cures. It is in the cases of so-called inoperable disease that it is not only justifiable but also wise to try these new remedies, since a patient with recurrent cancer will be only too glad to run any risk or to undergo any discomfort which gives the slightest chance of relief. During the last decade attention has been drawn by several distinguished surgeons to a number of methods of treatment as follows, and I will briefly give you the information which I have been able to collect on the subject: (1) inoculation with the streptococcus of erysipelas; (2) subcutaneous injection of Coley's fluid; (3) subcutaneous injection of anti-cancerous serum; (4) oöphorectomy; (5) thyroid feeding; (6) lymph gland extract; (7) treatment by Roentgen rays and by Finsen's light; (8) injection of various irritating substances and the production of aseptic suppuration; (9) electricity; and (10) drugs. When considering what benefit has been derived from any particular method of treatment, it must, however, be borne in mind that different forms of malignant disease behave in a manner peculiar to each growth, and that some of the atrophic forms of cancer of the breast have been known to diminish and even to disappear spontaneously.

INOCULATION WITH THE STREPTOCOCCUS OF ERYSIPELAS.

Nearly 200 years ago it was observed that a certain number of malignant growths disappeared after an attack of erysipelas, and attention has recently been drawn to the subject by Fehliesen and Billroth, who have reported cases of inoperable sarcoma cured by an attack of erysipelas. After the discovery of the streptococcus Fehliesen suggested that an inoculation of a cultivation of the organism might be used to produce a like result; he succeeded five times in producing erysipelas by inoculations of pure cultures of streptococcus in patients suffering from malignant tumour. He obtained a cure in a case of cancer of the breast, and in four other cases there was temporary atrophy of the tumour.

SUBCUTANEOUS INJECTION OF COLEY'S FLUID.

No satisfactory fluid was, however, obtained until Coley of New York introduced the use of the mixed toxins of the streptococcus of erysipelas and the bacillus prodigiosus. The preparation of the fluid was based on the discovery of Professor Roger of Paris, who found that the addition of a non-pathogenic micro-organism—the bacillus prodigiosus—to cultures of certain pathogenic micro-organisms, greatly enhanced the virulence of the latter, and among these organisms was the streptococcus of erysipelas. At first Coley mixed together the most virulent streptococcus cultures obtainable with that of the bacillus prodigiosus in the proportion of four of the former to one of the latter, sterilising the mixture by filtration, and preserving it by the addition of a little thymol. He now, however, makes the fluid by inoculating peptonised bouillon from the colonies obtained by passing the micro-organism of a fatal case of erysipelas through a rabbit's ear. The growth of the germ is then carried on for three weeks at a temperature of from 30° to 35° C., after which the flask is inoculated with the bacillus prodigiosus. The fluid is then exposed to a room temperature for 10 days, when, after being thoroughly shaken, the cultures are transferred to small sterilised glass-stoppered bottles, and sterilisation is ensured by exposing these to a temperature of 60° C. for an hour. The injections are made into the substance of the tumour itself, and the rule is to begin with a minimum dose and slowly to increase each day until the desired action is obtained. Toxins produced from very virulent cultures, mixed and unfiltered, should never be given in larger initial doses than half a minim, boiled water being added to obtain dilution. Each day the dose should be increased by half a minim until the reaction temperature reaches 102° or 103° F. The amount required to produce a feeling of chill, and a temperature of 102°, varies with the individual case, but one or two minims will generally be sufficient. The effects of the injection are rather unpleasant, nausea and vomiting frequently occurring after severe reactions, and after slight reactions, headache, muscular pains, especially in the back, and a feeling of general malaise. If no beneficial results are apparent after three weeks' treatment Coley believes that it is useless to continue the injections, since in nearly all of his successful cases marked improvement was seen within a week of the first injection. When apparent benefit results from the treatment and there is no contrary indication to its continuance it may be kept up for four months, with occasional intervals of rest. Coley has used the fluid in 148 cases, and out of these 24, or 15 per cent., improved. Six of these cases afterwards recurred, but the remaining 12 per cent. were permanent successes, some of the cases having remained well for six years. Coley has also collected 35 cases treated by other surgeons; out of these cases in 28 the tumour disappeared completely. Most of these cases had been diagnosed as sarcoma by both clinical and microscopic examination. Two cases were reported by Moullin in which death occurred in consequence of the injections. In the first case the patient was a man of about 70 years of age with a large vascular tumour of the femur; the other died from pyæmia. It was found that the greatest chance of improvement was in spindle-celled or mixed-celled sarcoma. Coley himself considers the results in carcinoma to be unsatisfactory

SUBCUTANEOUS INJECTION OF ANTI-CANCEROUS SERUM.

Last year Vlaieff introduced in Paris a method of treatment of advanced malignant disease by inoculation with a special anti-cancerous serum. He stated that he obtained from malignant tumours certain parasitic cells, called blastomycetes, which had the power of producing abdominal cancer in guinea-pigs when inoculated into the peritoneum. Having done this he endeavoured to immunise several different animals, but he only succeeded in getting an active serum from pigeons, fowls, and geese. This latter serum inoculated into rats prevented the development of cancer after subsequent inoculations with the blastomycetes. In man he inoculates 10 cubic centimetres of serum obtained from geese, and the dose, though considered free from any danger, produces a considerable local and general reaction. Vlaieff states that he has treated 60 cases of human carcinoma by this method. When it was administered early, before ulceration and glandular enlargement, the serum was capable of exercising a curative effect.

OÖPHORECTOMY.

The treatment of inoperable cancer of the breast by oöphorectomy is one of the most interesting subjects brought forward during the last few years. Much of our knowledge of the subject we owe to Mr. Stanley Boyd, from whose paper in the *British Medical Journal* I have freely drawn in

the following remarks. The first operation of the kind was performed by Dr. G. T. Beatson, of Glasgow, in 1896, and, although the patient was suffering from a large recurrent and inoperable growth of the breast, eight months after the operation all trace of the disease had gone. She died, however, from a recurrence nearly four years later. According to Mr. Boyd, Dr. Beatson was led to consider that oöphorectomy would be useful in treatment of inoperable cancer of the breast by the following consideration: "In lactation there is rapid multiplication of mammary epithelium; the cells undergo fatty degeneration as fast as they are formed, break down, fall into the lumina of the gland acini, and come away in the milk. Beatson learnt that certain farmers spayed lactating cows in order to maintain permanently or for a long time the above state of matters, resulting in the secretion of milk. In cancer also the mammary epithelium multiplies rapidly, but, instead of undergoing fatty degeneration and being cast off, it distends the acini, penetrates into the lymph spaces of the breast, and there, floating in a nutrient fluid, it continues multiplying and forcing its way onwards towards the lymphatic glands. As oöphorectomy in the cow maintains fatty degeneration of the epithelium of the lactating breast, Beatson thought that it might induce fatty degeneration of the epithelium of the cancerous breast. Accepting menstruation as the evidence of ovarian activity, Beatson was inclined to believe that the cessation of lactation was due to the re-establishment of the influence of the ovaries, which influence had been suspended by the gravid uterus, and thus removal of the ovaries resulted in the indefinite continuance of lactation. It further occurred to him as possible that cancer of the mamma might actually be due to some 'ovarian irritation' or to 'some defective steps in the cycle of ovarian changes,' and that removal of the ovaries might bring cancerous cell-proliferation to a standstill or induce fatty degeneration of the cells as seen in lactation." About the same time that Dr. Beatson reported his first case, Mr. Pearce Gould showed a woman who, six months before, had been apparently moribund with secondary cancer in the breast, in the supra-clavicular glands, in the right lung, and in the femur, and in whom without any treatment the cancer began to disappear, the menopause having occurred a year previously. Three years later she was in good health and free from disease. Mr. Boyd last year collected 54 cases of oöphorectomy for cancer, which were in no way selected cases, but included the whole experience of several surgeons. As a conclusion, he considers that on an average life was prolonged six months by the operation. Out of the 54 cases, 19, or 35 per cent., were more or less markedly benefited by the operation, and only one died. Mr. Boyd thinks that oöphorectomy should be offered in all cases, other than the very acute, of inoperable mammary cancer in women over 40 years with no visceral or bony lesions, and before the menopause. Cancer in other parts of the body, even in the uterus, is quite unaffected by oöphorectomy.

THYROID FEEDING.

The treatment of inoperable cancer by thyroid feeding is also due to Dr. Beatson, who considers that the so-called cancer bodies are not parasites but are cells undergoing mucoid degeneration, and he therefore thought that a free administration of thyroid extract might influence them greatly and in time effect a cure. Dr. Beatson employed the treatment in three cases; but in two of these it was associated with oöphorectomy, so that the improvement noticed was probably due to that cause; in the only case in which thyroid extract alone was given no improvement followed. Soon after this Dr. Frederick Page of Newcastle reported the case of a woman from whom he had removed a tumour of the breast and who within a few months developed a large and inoperable recurrence. Thyroid feeding was commenced with three-grain doses, and this was increased till 15 grains of the extract were given thrice daily, and at the end of 18 months the tumour had disappeared. It is interesting to observe that a fresh nodule of recurrent growth appeared during treatment. A further report of the case states that six months later the growth had commenced to increase and was quite unaffected by thyroid feeding. Another physician, Dr. R. Bell of Glasgow, was favourably impressed with the use of thyroid feeding and tried it in two cases of epithelioma of the cervix, and states that he obtained satisfactory results. Mr. H. T. Butlin, on the other hand, tried it in a good many cases, but has not obtained even temporary benefit in a single case. It should be noted that the favourable cases have been carcinoma of the breast, and there is no evidence that the treatment can be of any service in carcinoma of other parts.

LYMPH GLAND EXTRACT.

Somewhat analogous to thyroid feeding is the treatment by means of freshly-prepared lymph gland extract which has been recommended by Dr. H. Snow. Four grains of the extract are given in capsules, one being taken after each meal. Dr. Snow states that he has used this treatment in several cases of mammary cancer and that it resulted in considerable improvement.

TREATMENT BY ROENTGEN RAYS AND BY FINSEN'S LIGHT.

Several cases of rodent ulcer have been treated in the West London Hospital by means of exposure to x rays. Although they can scarcely be classified under the heading of inoperable cancer, still they have a distinct bearing on the subject. In applying the treatment the surrounding parts of the face, especially the eyes, are protected by means of a lead mask and a vacuum tube connected with a coil giving a 10-inch or a 12-inch spark is used. The vacuum tube is placed about five inches from the ulcer and an exposure is given daily for from 10 to 15 minutes. The ulcer is usually healed after about a month or six weeks. A few months ago Mr. Andrew Clark recorded a case of chronic cancer of the breast which was treated by x rays. The patient was a woman, aged 60 years, who had noticed a lump in the breast for nearly seven years. She had declined operative treatment and the lump had grown and ulcerated till the whole breast was replaced by a large ulcer. There were enlarged glands in the axilla. The x rays were applied five days a week for 15 minutes each day and at the end of two months the general condition had improved, the pain had lessened, the ulcer had cleaned and become smaller, and the axillary glands were getting less. This, as far as I can find, is the only case of cancer of the breast treated by the x rays, and it must be noted that it was of a very chronic type, its behaviour being more like a rodent ulcer than a scirrhus. The action of the x rays is almost similar to that of Finsen's light treatment, and several cases of rodent ulcer have been treated by that method; the treatment, however, is more painful than that by the x rays, and does not possess any advantages. Too few cases have been treated by either method to form any definite conclusion.

INJECTIONS OF VARIOUS IRRITATING SUBSTANCES.

Under this heading are included a number of rather diverse methods, the action of most of which is to excite inflammation in the tumour. Among these are (1) the parenchymatous injection of acetic acid; (2) the parenchymatous injection of alcohol; (3) the parenchymatous injection of methyl violet; (4) the parenchymatous injection of the venom of the cobra di capello; and (5) artificially produced suppuration, either (*a*) by oil of turpentine, (*b*) by arsenious acid, or (*c*) by calcium carbide.

Parenchymatous injection of acetic acid.—More than 30 years ago, in 1866, my attention was drawn by Sir William (then Dr.) Broadbent to the method of treating inoperable cancer by the parenchymatous injection of acetic acid. The injection must be made slowly, and Sir William Broadbent lays stress on a large quantity of a weak solution, as much as 80 minims, being preferable to a smaller quantity of a strong one. He employed the strong acetic acid of the British Pharmacopœia, diluted with three or four parts of water. A great number of injections have to be made and in some cases they were repeated daily. It was not claimed for this method that it was curative, but that it prolonged life and rendered the patient's suffering less severe. Sir William Broadbent treated some cases of recurrent cancer of the breast with very satisfactory results, the tumour being cast off in large fragments and the enlargement of the axillary glands subsiding. He also treated a case of cancer of the rectum producing obstruction of the bowel, in which the growth was much reduced in size and the obstruction relieved. About the same time, too, at his suggestion, I treated a case of cancer of the rectum. The patient died from exhaustion some little time afterwards and at the necropsy it was found that the tumour of the rectum had entirely disappeared, but that the liver and other abdominal organs were extensively affected by cancer. I also used this method in the case of a labourer who was sent to me from the country suffering from a large epithelioma on the back of one hand. I injected acetic acid (1 in 7) into the growth and repeated the injection once a week for six months. The growth entirely disappeared

under treatment and the patient was so pleased with the result that he indulged in several drinking bouts; unfortunately one of them took place on the day on which I had arranged to show him at the Medical Society of London and on his way to the railway station he fell into a pond and was drowned. The friends refused to let me have the hand.

Parenchymatous injection of alcohol.—This was first advocated by Schwalbe and Hasse in 1872. The latter surgeon has treated 20 cases of cancer by this method but has had only one successful case, a naso-pharyngeal cancer, and even in this case a large gland was left. According to another observer 15 cases of cancer of the breast out of 18 were cured. A 30 per cent. solution of alcohol was used at first, the strength being gradually increased to 40 or 50 per cent. The amount used in each injection varied from two to 10 cubic centimetres, and an injection was made every third or fourth day.

Parenchymatous injection of methyl violet.—Von Maestig Moorhof introduced the treatment of inoperable cancer by injections into the substance of the tumour of a solution of methyl violet. Watery solution (1 in 500) was used, and from three to six grammes of this were injected at short intervals. In several cases considerable shrinkage of the growth occurred. This treatment has been tried in the West London Hospital without producing any benefit. It is not so painful as the injection of alcohol. I have been unable to find any evidence of a cure following the treatment.

Parenchymatous injection of the venom of the cobra di capello.—The dry venom of the cobra di capello was employed by Répin in doses of one-fortieth of a milligramme, injected hypodermically. This dose was gradually increased to seven milligrammes. This patient's weight increased, but there was no alteration in the tumour, the injections producing painful sensations similar to those following the streptococcus toxin. It is not likely that any further experiments will be made with this remedy, as it is both painful and dangerous.

Artificially produced suppuration, either (a) by oil of turpentine, (b) by arsenious acid, or (c) by calcium carbide.—Crynski treated some cases of advanced carcinoma by producing suppuration of an aseptic character. He employed injection of oil of turpentine, and although much necrotic tissue was thrown off and suppuration was well established the advance of the disease was in no way checked. The injections, too, inflicted considerable suffering on the patient. On the other hand, Wurth records a case of sarcoma of the abdominal wall treated by injections of arsenious acid into isolated areas of the growth. After a short time profuse suppuration occurred and the treatment was abandoned. The suppuration continued for several weeks, when it gradually ceased and the tumour disappeared. Up to ten years afterwards there was no recurrence. Carbide of calcium in the presence of water produces acetylene gas, and Etheridge of Chicago has employed it in cases of carcinoma of the uterus in the following manner. The organ is first thoroughly curetted, the hæmorrhage being checked by the actual cautery. After being made as dry as possible a piece of calcium carbide of the size of the thumb is placed in the cavity of the uterus, which is then firmly packed by iodoform gauze. Acetylene gas is at once evolved, which produces a large amount of froth. The patient is kept in bed for three days, when the dressing is removed and a fresh piece of calcium carbide is inserted. After a series of such applications a clean, simple ulcer remains. In two cases a cure was obtained by this method, but at present its application has been too limited to warrant any opinion being formed of its value.

ELECTRICITY.

There are several different methods in which electricity can be employed in the treatment of cancer. Inglis Parsons has treated several by means of currents having a high electro-motive force, the current being flashed instantaneously a number of times through the tumour. The patient is anæsthetised and insulated needles are placed into the tumour some inches apart. The current is obtained from 70 cells and has an electro-motive force of 105 volts. He commences with a current of 10 milliampères and increases it to as much as 600 milliampères, the application being instantaneous and being repeated about 50 times. Although some of Dr. Parsons's cases improved they were, however, of the class which could have been treated quicker and more certainly by operation, and one patient at least died from the shock of the use of too strong a current. Reading of Philadelphia has reported three cases of advanced cancer successfully treated by frequent and long-continued electric punctures, a current of from 15 to 20 milliampères being used for about 10 minutes at each application. The disadvantages of this treatment are the pain and the duration. The term "kataphoresis" has been applied to the treatment by means of a strong current, in which a zinc electrode heavily coated with mercury is placed in the tumour while the negative pole is connected with another part of the body. Massey employed this treatment and believes that the oxychloride of mercury has a selective action on cancer cells. He found cocaine anæsthesia sufficient to allay the pain, so long as the current was not stronger than 150 milliampères, but as in other cases he uses currents of 500 milliampères he recommends general anæsthesia. In eight cases treated by this method improvement was seen in all. The objection to the method is the necessity for frequent and long-continued treatment and its uselessness where the lymphatic glands are involved.

DRUGS.

Chelidonium majus (celandine) enjoys a great reputation in the East Indies for the treatment of cancer, and was first recommended in Europe 30 years ago. Attention has recently been drawn to it by the publications of Dennisentio and other Russian physicians, and an excellent *résumé* of the work of these physicians appears in an article in the *Therapeutic Gazette* by Spirak. Dennisentio gives half a grain of the extract in peppermint water, increasing the dose to five grains in the 24 hours. If given hypodermically, the extract is diluted with distilled water, and one cubic centimetre is injected not oftener than once a week. Spirak has collected 61 cases treated by 14 different surgeons in this way; of these 33 showed improvement and 27 did not. Great benefit follows the exhibition of large and increasing doses of morphia in hopeless cases. The drug should be pushed without any scruple, and it is quite immaterial how large an amount is taken at the end; it is quite common to give several grains of morphia each day.

As a result of this review of the different remedies which have been recommended we may, I think, arrive at the following conclusions:—

1. That in cases of inoperable sarcoma, more especially the spindle-cell variety, the patient should have the option of Coley's fluid given to him, since a certain number of cases have been cured.

2. That in cases of inoperable cancer of the breast in women of about 40 years of age in whom the menopause has not occurred the operation of oöphorectomy should be proposed, and this treatment may be combined with thyroid feeding.

3. That in cases of inoperable rodent ulcer and in the superficial malignant ulceration in other parts the Roentgen rays give a good hope of improvement.

4. That in cases where these other methods are declined or are inapplicable the internal administration of celandine is worthy of trial, and when the case appears quite hopeless morphia should be pushed without hesitation.

5. Finally, I would suggest that before trying any of these remedies the risk should be fully pointed out to the patient, that the faint hope that most of them afford should not be magnified, and that the discomfort of treatment should be fully discussed; in fact, the surgeon should not do more than offer the treatment and leave the person to accept or receive it.

In conclusion, I should like to express my thanks to my friend Mr. L. A. Bidwell for the able assistance he has given me in investigating this subject. I have also to express the sense of loss which the society has suffered in the removal by death of Dr. J. L. W. Thudichum. Dr. Thudichum was one of our earliest Presidents, and had always taken the very deepest interest in the society's welfare. His geniality and consideration for others endeared him to everyone who knew him, and his enthusiasm and deep store of knowledge made him respected by all.

PREVENTION OF TUBERCULOSIS.—At the meeting of the Exeter City Council held on Oct. 2nd it was decided to invite the medical profession of Exeter to notify all cases of pulmonary tuberculosis under treatment by them for one year and that the usual fees should be paid as for cases under the Infectious Diseases Notification Act. It was further determined that the sanitary inspector should visit all such cases and should offer his services for disinfection, &c.

RECENT DISCOVERIES IN CENTRAL AMERICA PROVING THE PRE-COLUMBIAN EXISTENCE OF SYPHILIS IN THE NEW WORLD.

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SINCE the first recognition of the various symptoms of syphilis as phases of a single specific disorder which took place in the closing years of the fifteenth century two points in its history have provoked no small amount of controversy, alike amongst physicians and antiquaries; firstly, did syphilis exist in America before the discovery of that continent by Christobal Colon? and, secondly, was syphilis introduced from the New to the Old World?

I propose in this paper, after giving a short account of the early history of syphilis and the various causes supposed to have given rise to it, to describe the contents of an ancient Indian mound opened by me a short time ago in Honduras which supply circumstantial evidence so strong as almost to amount to proof positive of the pre-Columbian existence of syphilis in America, and this point once proved the probabilities are, it must be apparent, strongly in favour of the disease having been first introduced into the Old World from the New. That various forms of venereal disease were prevalent in the East, especially in China and India, centuries before the discovery of America is a fact not to be denied, but the descriptions handed down to us are so vague, fragmentary, and disconnected that it is impossible to recognise from them the exact nature of the disease. On its first recognition as a specific disease the opinions of contemporary physicians as to its origin were varied and marvellous; thus, Corradino Gillini and Gaspare Torella, two of the first physicians of their day, believed that the disease arose from the near conjunctions of the sun with Jupiter, Saturn, and Mercury, in the sign of Libra, which took place in the year 1483. Nicolaus Leonicenus, in his "Opus de Morbo Gallico," attributes it to the abundant rainfall in Italy about the time of its first appearance. Manardi, a professor of the University of Ferrara, attributes it to "the impure commerce of a Valentian gentleman who was leprous with a prostitute." Gab. Fallopio, a Modenese physician, puts it down to the poisoning of the well-water by the Spaniards in the war of Naples, which water being drunk by the French gave rise to syphilis. Andrea Cesalpina, physician to Clement VIII., relates that the Spaniards in the same war, escaping from Somma, which was besieged, left behind them a great number of jars of Greek wine mixed with the blood of the sick of San Lazaro, which being discovered and drunk by the French produced syphilis in their army. Leonardo Fioravanti, a Bolognese physician, in his "Capricci Medicinali," asserts that in the year 1456 both the French army and that of Alfonso, king of Naples, being short of provisions were supplied by the sutlers with human flesh dressed in such a manner as to resemble that of the tunny fish, upon eating which they were afflicted with syphilis. Vatablo Peneda and other authors ascribe an even more ancient origin to the disease, for they assert that it is none other than that from which the patriarch Job suffered; indeed, so widely did this view gain credence that for a considerable period after its first appearance in Italy it was generally known in that country as "Job's evil," though in what manner it had been transmitted from the patriarch's time to the fifteenth century none of these ingenious authors attempt to show.

The first authentic account which we have of an undoubted outbreak of syphilis in Europe, during the year 1494, tallies exactly with the return of Christobal Colon from his first voyage to the Indies, which took place in March of the previous year. Moreover, Ruy Diaz de Isla, a physician of Seville, affirms that several of Colon's men suffered on board ship from this disease, which they had contracted in Hispaniola, and that on their landing in Barcelona, where the court was then held, they spread the contagion, so that this city was the first affected, the epidemic becoming so serious that "prayers, fastings, and almsgivings were appointed to appease the anger of God." Oviedo affirms that the syphilis which was prevalent amongst the soldiers of the great Captain Gonzale de Cordova, in his campaign against Louis XII., had been introduced by some of the members of Colon's company who formed part of the army, the disease having been first introduced by D. P. Margarit, one of the Spaniards who returned with Colon in 1496 from his second voyage, and by him communicated to some prostitutes, through whom it rapidly spread.

Astruc, in his "De Morbis Venereis," vol. ii., Venice edition, upholds the American origin of syphilis. Speaking of the island of Hispaniola, he says: "Multis ergo et gravissimis morbis indigenae insulae Haiti affici olim debuerunt, ubi nemo menstruatis mulieribus se continebat; ubi viri libidine impotentes in venerem obviam belluarum ritu agebantur; ubi mulieres impudentissimae erant, viros promiscue admittebant ut testatur Consalvus de Oviedo, Hist. Ind., lib. v., cap. 3, immo eosdem et plures impudentius provocabant menstruationis tempore cum tunc incalescente utero libidine magis insanirent pecudum more. Quid igitur mirum, varia, heterogenea, acria multorum virorum semina una confusa, cum acerrimo et virulento menstruo sanguine mixta intra uterum aestuantem et olidum spurcissimarum mulierum coercita, mora, heterogenitate, calore loci brevi computruisse, ac prima morbi venerei semina constituisse, quae in alios, si qui forte continentiores erant, dimanavere." Astruc, though an authority upon the place of origin of the disease, can hardly be looked upon as such in regard to its causation and pathology. He considers the venereal poison to be due "to the wheyish part of the lymph assuming a singular thickness, and acrimony, due to an acid salt, corrosive and of a fixed nature."

Nicholas Monardes, a physician of Seville and a contemporary of Diaz, says: "During the year 1493, in the war of Naples, between the Catholic and the French kings, Columbus arrived after his first discovery of the island of Hispaniola, and brought with him from that island a multitude of Indians, men and women, whom he carried to Naples, where the Catholic king then was, after the war was over. And as there was peace between the two kings and the armies communicated together, when Columbus came there with his Indian men and women the Spaniards began to have commerce with the Indian women, and the Indians with the Spanish women, and in that manner the Indian men and women infected the Spanish army, the Italians, and the Germans."

Las Casas, "the Bishop of the Indians," who, though a Spaniard, was violently prejudiced in favour of the Indians, admits that they readily acknowledged the presence of syphilis amongst them long before the coming of Europeans. Dr. Gustavus Beühl of Cincinnati, Ohio, who has made considerable research into the subject, shows from the writings of the early Spanish historians that the disease was not only well known amongst the native tribes, but that amongst the Mexicans its treatment was far better understood than it was in Europe for many years after its first introduction, and that those who died from this disease were not (as was customary) cremated, a fact the importance of which will appear later. The Maya language, which is almost universally spoken by the Indians of Yucatan, Honduras, and parts of Guatemala, and Mexico, has a special name for syphilis, and not one borrowed from the Spanish, or coined either from a fancied resemblance to the sound of the Spanish name or some prominent characteristic of the thing named, as is the case with most of the numberless new objects introduced at the conquest. Dr. Hyde, in an article entitled, "Pre-Columbian Syphilis in America," published in the *International Journal of Medical Sciences* for August, 1891, strongly upholds the pre-Columbian existence of syphilis amongst the American aborigines. In this article are described and figured bones taken from ancient Indian sepulchres, many of which exhibit undoubted syphilitic lesions. Magellan asserts that it was a common disease amongst the inhabitants of Timor, an island in the Moluccan Archipelago, at the time of his visit. Clavigero, in his "History of Mexico," vol. ii., Dissertation 9, attempts to prove that the disease did not originate, and could not possibly have originated, in America, but his chief reason for upholding this view appears to be that his *bête noire*, M. de Paw, holds a contrary one. He affirms in support of his opinion that the disease, being a newly-introduced one amongst the aborigines of America, was on that account far milder and less malignant than amongst Europeans, but we now know that, on the contrary, all diseases newly introduced from Europe to America, such as small-pox, measles, &c., have proved

terribly fatal to the aborigines who almost invariably suffer from a highly malignant form rarely seen in the Old World where through centuries of transmission they have become more and more modified in form and less malignant. The fact, therefore, that the Indians were and are less liable to the disease than Europeans and suffered from a milder form would rather go to prove that the disease had been common amongst them for centuries.

The mound to which I alluded at the commencement of these notes was situated in the northern district of the Colony of British Honduras, near the village of San Andres. It was nearly circular at the base, conical in shape, 18 feet high by about 90 feet in circumference, and built throughout of large blocks of limestone, the interstices between which were filled in with limestone dust and earth, forming together a sort of mortar which made the whole structure nearly as solid as masonry. An excavation was commenced near the centre of the mound and at a depth of about two feet below the surface a large circular disc of roughly-hewn limestone was brought to light. On lifting this it was found to cover a well-like cavity three feet in diameter by about five feet deep. At the bottom of the hole lay a roughly made, circular earthenware pot, 18 inches in diameter, covered by a lid. Within this pot, together with a number of other objects, were found two rudely-fashioned earthenware figures, one of which is shown in the illustration. A third figure was also

Clay figures found in a Maya tomb.

found, which was precisely similar in every respect to those depicted; this has been purchased by the British Museum, where it may now be seen. Each of these little clay figures is about four and a half inches in height, and represents an individual, who, from his head-dress (not unlike our bishop's mitre) is probably a Maya priest seated on a low four-legged stool. The genital organs are in all three cases out of all proportion to the magnitude of the figures, probably with the idea of drawing special attention to them. The penis, which is represented as being nearly as large as the leg below the knee, is grasped by the glans, in one case with the left and in the other with the right hand, whilst the other hand holds a long pointed implement, with which it is evident that some operation is either about to be, or has been, performed on that organ, probably the latter, as upon the upper surface of the glans, which is enormously enlarged and flattened from above downwards, several scarifications are seen. That these earthenware figures were manufactured by the Mayas before the coming of Europeans is abundantly clear from the fact that they wear the huge circular earrings, and one of them the circular lip ornaments of ancient times; and also, as before stated, that they wear the priestly head-dress of the Mayas. Moreover, with them were found several clay figures of alligators, which amongst the Mexicans were symbolical of Death the devourer of all, and in this connexion were frequently buried with the dead in pre-Christian days. The figures when first discovered were exceedingly brittle and it was found impossible to remove them from the pot without breakage, as they had probably been only sun-dried; after exposure to the air and sun, however, for a few days they gradually hardened. All the clay objects found in this pot were painted in various devices with bright colours, chiefly red, blue, yellow, and black; the colours had, however, from centuries of exposure to the damp become considerably dulled and defaced. The only unpainted object of clay found in the jar was a natural-sized model of the human penis in a state of semi-erection. This is an exceedingly accurate model and differs from all the other clay objects in that it has been fired instead of merely sun-dried, and is on that account much harder. Upon the upper surface of the glans penis are three longitudinal incisions extending almost from base to apex and evidently made with a sharp-pointed implement whilst the clay was still soft. Together with these clay figures a number of perforated beads of jade and some dark red stone, all nicely polished, were found; also the tooth of a large alligator, perforated at its base, evidently for suspension with the beads. At a distance of about six feet to the north of the centre of the mound and at a depth of three feet below the surface was discovered a small square stone cyst or chamber, measuring 18 inches in every direction, and built of roughly squared blocks of limestone; within this were found most of the bones of a male of medium height and of fair muscular development. The bones were exceedingly friable, many of them, indeed, having disappeared entirely; they showed no signs of partial cremation, and with the exception of the tibiæ were in no way abnormal. The upper articular surface of the right tibia had disappeared. The shaft instead of being triangular was rounded in section, the prominent angles at the front and sides being obliterated; it was slightly bowed, with the convexity anteriorly, and was a good deal enlarged, especially in its upper two-thirds, which were composed chiefly of friable, spongy, cancellous tissue which rendered the bone much lighter than it appeared. The surface was exceedingly rough, especially in the upper part of the bone, being covered with a number of small nodular outgrowths, between which were small pits or depressions. The bone was not examined microscopically. Of the left tibia only small fragments remained, but as far as could be judged from these a change somewhat similar to that undergone by the right bone had also taken place here, though not to such a marked extent. It was impossible to identify the fibulæ, as only small portions of bone corresponding to them in circumference were to be found, the articular extremities of which were absent. I have opened nearly 100 ancient mounds in Central America, a large number of which have proved, from the presence of bones within them, to have been at least partially sepulchral in origin, but this is the one solitary instance in which the interment took place within a stone chamber without any previous attempt at cremation. The most usual method of disposing of the dead appears to have been, first, to cremate, or partially to cremate, the body (usually the latter), and then to collect the ashes and fragments of bone in an earthen jar, which was buried in a mound together with a number of the possessions of the deceased, such as spear, arrow, and axe heads, obsidian knives, skin rubbers, beads, and other ornaments, &c., and in the case of children, toys of various kinds. Occasionally, though very rarely, bones are found in an urn which show no traces of cremation, in which case the interment must have been secondary, the bones being collected from the first place of burial and re-interred within the mound in which they were found. The reason for this was probably that the individual either died or was slain in battle at a distance from his home, and it was either impossible or inconvenient to remove the corpse at the time. In the present instance it is evident that the bones had been collected after the flesh had either been removed or decayed away from them, as it would have been impossible to bury the corpse of a full-grown man within the small cyst in which the bones were found.

The foregoing facts taken together form, I think, a chain of evidence in proof of the individual who was buried in this mound having died from syphilis which is almost irresistible.

To recapitulate: 1. The clay figures, indicating that the persons whom they were meant to represent suffered from

some disease of the penis, confined apparently to the glans, a supposition which the life-sized penis tends to confirm. It is, of course, conceivable that as these figures were dressed as priests they may have been performing some ritual act of self-mutilation, a common occurrence, as we know from contemporary writers, amongst the Maya priests, but these acts were, as far as is known, confined to cutting and slashing the limbs and drawing twigs and small ropes interwoven with thorns, through a recently-made slit in the tongue, no author having mentioned mutilation of the penis. 2. The condition of the tibiæ, which may, of course, have been due to caries or other morbid changes unconnected with syphilis; but when we remember that both bones were affected, that the tibiæ are favourite sites for syphilitic morbid changes, and that the owner had evidently been afflicted with some disease of the glans penis, from which he presumably died, the evidence in favour of syphilis is overwhelming. 3. The peculiar and unique method of burial. We know from the accounts handed down by Sahagun, Torquemada, and other Spanish historians that amongst the aboriginal tribes persons who died from syphilis were not cremated (as was customary), but had a special mode of burial accorded them, and here, I think, we have it before us.

Corozal, British Honduras.

A REMARKABLE CASE OF A FOREIGN BODY IMPACTED IN THE RECTUM.

WITH REMARKS.

BY A. MARMADUKE SHEILD, M.B. CANTAB., F.R.C.S. ENG.,
SURGEON TO ST. GEORGE'S HOSPITAL.

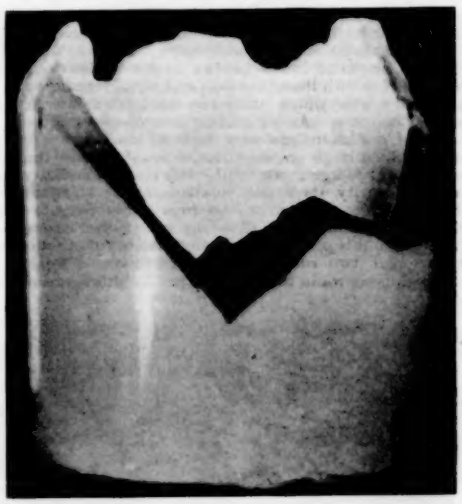
A THIN, spare, grey-haired man, aged 60 years, was admitted into St. George's Hospital in July, 1901. Four days prior to admission he had forced a gallipot up the rectum. He had passed some loose evacuations since and there was no great pain or difficulty in micturition. Strenuous attempts had been made by the patient to remove the pot with the fire-irons and some pieces had been broken off, with the result that large, irregular, sharp, jagged projections of earthenware presented downwards towards the anus, burying themselves in mucous membrane and seriously increasing the difficulty of extraction.

An anæsthetic was administered and the broken ends of the gallipot could just be felt by the index finger, but they were embedded in swollen and prolapsed mucous membrane. Knowing the perilous nature of these cases and the extreme difficulty experienced by others in similar circumstances I made no serious attempt at extraction until I had divided the bowel posteriorly. The incision was very free, down to the coccyx behind, and the bistoury was entered above, close to the foreign body. A short-bladed pair of midwifery forceps were next employed and I endeavoured as far as possible to engage the most dangerous jagged projections in the blades of the forceps. With careful traction and "swaying" movements the mass passed into the large wound whence it was easily extracted. Its extraordinary size and form are well seen in the accompanying illustration from a photograph kindly taken by my late dresser Mr. J. W. Seccombe. I united the great posterior wound with deep sutures, but these had to be removed soon, for the parts became very septic. The wound was lightly plugged as in a deep fistula operation and a warm boric hip-bath was constantly employed. Thanks to the care taken of the case by the nurses and Mr. W. F. Fedden (the house surgeon) the patient made a good recovery, which was interrupted only by a slight pleuritic attack. The wound is now not quite healed, but he is recovering power over his motions gradually.

No motive could be assigned for this rash and foolish act. The patient's wife stated that he was a morose man, unsuccessful in life, but that she had never noticed symptoms of insanity. She believed that he had occasionally inserted potatoes into the bowel and she had taxed him with this act.

Perusal of the cases presently to be related will show that these curious accidents are by no means devoid of great peril. The risk of lacerating the mucous membrane is very great and the impaction seems peculiarly tight. Indeed, in the St. Bartholomew's Hospital case spoken of below the abdomen had to be opened and pressure brought to bear upon the foreign body from above before extraction could be effected by traction.

The rarity of foreign bodies being introduced in this manner may be gauged from the few instances which I am able to relate in this communication. A case was related in 1896 by Mr. J. Good,[1] then of Leominster, which occurred in a man,



Jam pot, exact size, extracted from the rectum.

aged 74 years, who had suffered from diarrhœa with passage of blood and mucus. Examination detected a foreign body and then the patient confessed to having introduced a "Worcester sauce bottle." Mr. Good removed the bottle by passing a gum catheter round it and making traction. The long neck of the bottle appeared to be tilted forward and had caused retention of urine, which was relieved by its removal. I have addressed queries to the custodians of all the principal hospital museums in Great Britain and Ireland with little result. The great collection in Edinburgh, for instance, contains only specimens which have descended into the lower bowel from above. Thus Series 26 contains one instance of intestinal concretions, one of a large gall-stone, two of doubtful substances, and one of a nail which had been swallowed. The Hunterian Museum in London contains no such specimens, though it exhibits such curiosities as a swallowed table-spoon which reached the cæcum and an egg-cup impacted in the ileum. In conversation, however, I have heard of cases similar to the one I relate which have never been reported, and the treatment is so difficult and dangerous that all such accidents, however rare, are worthy of being related.

Mr. W. E. S. Burnett of Mottram furnished to Mr. Harrison Cripps the particulars of an instance of impacted jam-pot, and I suspect that this is the case referred to by the other authors. Here a tall and robust man of temperate habits and sound mind forced a jam-pot up his anus. Afterwards finding that it obstructed his motions he knocked out the bottom with a poker. The prolapsed intestine had passed through the opening in the bottom of the pot, which was uppermost, and was swollen and pulpy. In one and a half hours Mr. Burnett succeeded in removing the pot by crushing it with a craniotomy forceps and syringing. The patient would not take an anæsthetic.[2]

The majority of these curious cases, however, seem to have originated in a desire to treat some rectal complaint, imaginary or real, as chronic constipation or worms. Authors speak of the impaction of an eau de Cologne bottle and of a jam-pot two and three-quarters of an inch in diameter which remained in the rectum for six days.[3] This last

[1] Brit. Med. Jour., Nov. 7th, 1896, p. 1427.
[2] Cripps: Diseases of the Rectum, p. 284.
[3] Cooper and Edwards: Diseases of the Rectum, p. 304.

instance is probably the same as that quoted by Mr. Cripps. One of the earliest recorded cases in this country is related by a Mr. Thomas, who in 1812 introduced his whole hand into the rectum and removed a piece of cane nine inches long. The patient had used this habitually for the relief of constipation.[4] Thus this surgeon may be looked upon as the pioneer of rectal exploration by means of the hand.

Mr. Laurence Cripps has kindly copied out for me the following interesting accounts of the specimens in the Museum of St. Bartholomew's Hospital:—

"3391 W., St. Bartholomew's Hospital Museum.—A white glazed porcelain jar, measuring three and a half inches in length and nearly two inches in diameter, which was removed by operation from the rectum. The jar is similar to those used for the preservation of Liebig's extract of beef. The patient was a man, aged 35 years, who placed a small potato in the orifice of the jar and then sat on it to allay, as he said, intense itching at the anus. The jar slipped into the rectum. He came to the hospital and attempts were made with midwifery and other forceps for over two hours under an anæsthetic to remove the jar, but unsuccessfully. The next day he was again placed under an anæsthetic and the sphincter ani was divided back to, and on either side of, the coccyx. It was not, however, until the abdomen had been opened and the jar (with the potato still impacted) had been pressed down from within by the hand of an assistant that it could be extracted. So much injury had occurred to the rectum and the surrounding tissues that peritonitis set in and proved fatal."

"3391 G., St. Bartholomew's Hospital Museum.—Two masses of silver ore removed from the rectum of men working in the silver mines of Chili. The larger mass weighs 30 ounces and measures five and a half inches in its longest diameter and eight and a half inches in circumference; the smaller one weighs eight ounces. A gentleman living in Chili who sent the specimens to England writes: 'In the silver mines here the men on coming out of the mine are stripped naked and well searched. Among other habits some of them accustom themselves to pushing pieces of ore into the rectum, leaving a short piece of string to pull it out by, and some of these miners are by this means able to steal during the year a large amount of silver ore. I was present the other day when the men were leaving the mine and saw the searching. The two specimens I send were taken from the rectum of two of the miners. I have seen even larger pieces removed than these.'" The enormous size of the silver ore would indicate that the thief had long used his rectum for purposes of concealment.

In reference to this latter case it may be remarked that the Kaffirs in the Kimberley Mines secrete diamonds in the same way. A well-known resident in South Africa informed me that it was customary to give the natives powerful purgatives before they leave the "compound" after their term of work is concluded. By this means diamonds of value are not infrequently recovered.

The only other case of the kind which, so far as I know, has occurred at St. George's Hospital is as follows. It well illustrates the inevitable danger of laceration. In March, 1890, a man, aged 45 years, was admitted into St. George's Hospital with a foreign body in the rectum. He had long suffered from prolapse and to relieve this he forced up the bowel a glass pomade-pot. He was admitted very ill and the pot could just be felt with the index finger. Prolonged attempts were made to remove it, but without avail, by means of hooks. The sphincter was finally divided and the pot was extracted with a midwifery forceps. The patient died from peritonitis. A small laceration was found anteriorly about three inches up the bowel which opened the peritoneum. This had obviously been made by one of the hooks unavailingly used in extraction.

Pages might be written regarding foreign substances lodging in the rectum which have been swallowed and have come down from above. Intestinal concretions, fish or other bones, tooth-plates, coins, pins, and needles are familiar examples. Some of these have been swallowed by accident, others by design, by jugglers, children, hysterical persons, or lunatics. It is a cardinal rule that when a person of unsound intellect exhibits symptoms of rectal irritation, as the passage of blood and mucus with "spurious" diarrhœa, to suspect that a foreign body may have been introduced, by the mouth or otherwise. Probably the experience of these engaged in lunacy practice could supplement this. Again, a class of foreign bodies in the rectum may be found which have been introduced by pure accident. Such may result from breaking an enema apparatus, or a fall on the buttocks on broken wood or glass or china. With all such cases as these, which are in the knowledge of all practitioners of experience, this short paper does not profess to deal. Should any surgeon meet with one of these curious and embarrassing accidents, the experience of this paper will not be devoid of utility to him. The division of the structures posteriorly seems an essential preliminary to any attempts at extraction. I should not hesitate to remove part of the osseous structures if needful. Short midwifery forceps are probably safer instruments for extraction than any hooks or weapons which might inflict laceration.

Cavendish-place, W.

[4] Transactions of the Medico-Chirurgical Society, vol. i.

A CASE OF LAPAROTOMY

FOR MULTIPLE SEPTIC ABSCESSES AND INTESTINAL ADHESIONS POSSIBLY DUE TO SALPINGITIS, CAUSING OBSTRUCTION, FOLLOWED BY A SECOND OPERATION NINE DAYS LATER FOR ACUTE OBSTRUCTION DUE TO A BAND AND VOLVULUS; RECOVERY.

BY A. ERNEST MAYLARD, M.B., B.S. LOND.,
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I AM tempted to record this case not only because of the triple cause which had led to acute intestinal obstruction but also as an illustration of what surgery can do, or better, perhaps, what nature can endure and repair. As an example of intra-abdominal tolerance of surgical manipulations it exceeds anything that has hitherto come within my experience, and shows that nature sometimes prefers even the most radical surgical intervention to the baneful influences of certain pathological conditions.

The case was that of a young woman, aged 17 years, whom I was asked to see in consultation with Dr. Archibald Brown of Mount Florida on April 19th, 1901. The symptoms at this date were not particularly clear, although sufficiently grave. They suggested subacute obstruction dependent upon some inflammatory condition, although upon what the latter depended it was impossible to say. As it was considered that some slight improvement had taken place since the onset of the illness a few days previously, and that, according to the parents' statement, their daughter had recovered from a somewhat similar, though not so severe, attack before, merely palliative measures were suggested. I was not asked to see the patient again until May 3rd, that is to say, a fortnight after my first visit, when I was informed that while improvement had seemed to take place for a time she had now become very ill again. When seen on this second visit she was extremely ill with evident symptoms of acute intestinal obstruction and a temperature of 102° F. I had her removed to a private room in the Victoria Infirmary as soon as possible and made all arrangements for the performance of the operation on her arrival. As pain had been mostly felt in the left iliac region and there were both tenderness and resistance over the same area, I made my incision through the parietes at this part. On opening the peritoneal cavity a stream of fœtid pus escaped. The intestines were glued together, and as they were detached localised collections of extremely offensive pus were liberated. The left appendages were found in one of these pockets, the ovary being cystic and the tube thickened and distended. In detaching one portion of bowel the serous coat was torn; this was carefully stitched with a continuous Lembert suture. All pus and inflammatory exudate were removed as exposed by means of small swabs of gauze. As the patient's condition became alarming no further attempt was made to remove the appendages, but the various septic areas were plugged with iodoform gauze and the parietal wound was rapidly closed as much as the "stuffing" would allow.

Although greatly collapsed after the operation the patient soon rallied and in the evening both flatus and fæces were passed per rectum. For eight days progress continued uninterruptedly, except that a bad bedsore formed over the sacrum, the result of the extreme degree of emaciation to which she had been reduced. On May 12th, nine days after the

operation, I found her on my morning visit suffering from evident symptoms of acute intestinal obstruction and concluded the cause to be some kinking or binding down of the bowel, the result of the adhesions about the seat of the original operation. The patient was again removed to the operating-theatre and an incision was made through the parietes in the median line below the umbilicus. As my object was not only to liberate the supposed involved loops of intestine but to remove the left appendages, I preferred to do this through a fresh incision in the median line rather than to re-open the existing septic channel. My first encounter was with another localised fœtid abscess which was encircled and retained by loops of matted intestine; this, as in the previous one, was swabbed out. At the same time every precaution was taken to prevent any septic infection of the upper part of the abdominal cavity. The matted intestines were again disengaged and withdrawn from the abdomen so as to ensure of no involved loop escaping observation. Search was then made for the left ovary and tube, but these were found so inseparably matted to the anterior wall of the pelvis, and free from any neighbouring septic material, that it was decided not to prolong the operation by any attempt at their removal. When it was supposed that the operation was completed so far as the intra-abdominal part was concerned, it was accidentally discovered that a distended and congested loop of small intestine presented at the upper part of the parietal wound. The parietal incision was extended upwards sufficiently to expose the bowel above, when it was found that a tense fibrous band extended transversely across the gut, completely occluding it. The band was divided but the bowel failed to empty itself onwards; hence an incision was made into it and its contents were allowed to escape, or rather were made to escape, by passing the distended gut between the fingers. Another difficulty now presented itself. It was found impossible to empty even by this manipulative process a long coil of small intestine lying higher up in the abdomen. On searching for the reason it was soon found that this loop of intestine had formed a complete twist upon its mesentery. When untwisted the remaining contents of the distended gut were easily squeezed out through the enterotomy wound. The patient by this time was almost *in extremis*. It took, however, but a few minutes longer to close the enterotomy wound and to return the collapsed bowel. During the intestinal manipulation I came upon the appendix which while containing a fæcal concretion was entirely free from any inflammatory complications. It was, however, accidentally removed, for in our excusable hurry, it suddenly gave way near its attachment to the cæcum, while being held up. Time did not permit of our performing the toilet connected with an appendicectomy, so reliance was had upon the stuffing which was freely employed here as in other septic and doubtful areas of the abdomen. The patient was got back to bed where she lay for some time in a profoundly collapsed condition. With, however, the unremitting and constant attention of my assistants, Dr. David Russell and Dr. John Duncan, and my nurses, the patient not only rallied but made an almost uninterrupted recovery. I say "almost" because for some time there was a fæcal fistula at the lower part of the median incision. I believe this was the result of the unintentional and uncompleted appendicectomy. It, however, eventually closed.

In reviewing the case from its pathological aspects I must own to difficulties in rightly interpreting the cause, or causes, of what I found. I have ventured to suggest salpingitis as the origin of the mischief first dealt with and yet there was nothing in the history of the case to allow of the slightest suspicion as regards a vaginal or uterine discharge of any kind. The tube was certainly thickened and apparently distended; but might not this have been the result of external inflammatory influences? Is it possible that a tuberculous lesion could have explained all the conditions found? The intestine showed no evidences whatever of ulceration so far as could be judged from external appearances. But I have no intention of pursuing further this aspect of the question. I have recorded the case merely as one which seemed to me to possess, from a practical surgical aspect, several points of interest. Not the least of these were those connected with the natural power of the peritoneum to resist the severe and extensive mechanical interference when it failed, or was failing, to combat successfully grave and fatal pathological processes.

Glasgow

MUCIN IN DESICCATION, IRRITATION, AND ULCERATION OF MUCOUS MEMBRANES.

BY W. STUART-LOW, F.R.C.S. ENG.,
ASSISTANT REGISTRAR CENTRAL THROAT AND EAR HOSPITAL.

LAST year I published a paper dealing with the use of mucin in gastric ulcer, but then I could only speak on the subject tentatively, because I had employed mucin only in a limited number of cases, although very successfully. During the last 12 months, however, the more extensive use of this natural remedy has more than ever convinced me, as also others who have made application of it, that in suitable cases it is a most valuable therapeutic agent and that it will afford relief and sometimes cure when all other treatments fail. To better understand the premisses on which the arguments in favour of the use of mucin are based it is necessary to refer to certain anatomical and physiological points. The interior of the nose and that of its accessory cavities are lined by mucous membrane and the provision for the secretion of mucus in the inner lining is very complete and extensive. In the olfactory region—all above the middle of the middle turbinated bone—there are comparatively few muciparous cells or glands. In the regio respiratoria—all below the middle of the middle turbinated bone—the contrast with this anatomical condition is very marked and the special provision that is here made for the secretion of mucus shows how important the presence of this secretion is and what a large quantity must constantly be poured out even in the normal nose. In the sphenoidal sinus there are about 20 muciparous glands. The lining membrane of the accessory cavities is a thin one with a ciliated surface, a thin basement membrane, and sub-mucous tissue, and the glands are mostly aquiparous. There are some mixed glands in the antrum maxillare, but in the ethmoidal cells and frontal sinuses the secretion is watery. The fact that the lower or respiratory tract is much the wider when compared with the upper or olfactory tract which is narrow and slit-like, thus affording a vastly larger surface for secretion, is also noteworthy. The most closely packed gland surface in the body is the stomach surface, where there are the open mouths of glands to the number of 100 to the square centimetre; on the nasal septum gland openings are similarly exceedingly abundant. The gland openings, mostly muciparous, are found numbering as many as 70 to the square centimetre and on the inferior turbinated bones also these glands are very numerous, being only slightly less thickly placed than on the septum. This is also the condition conspicuously seen on the mucous lining of the lower half of the middle turbinated bones and also in the posterior part of the outer wall of the nasal cavity.

The next point of importance, anatomically, as defining the direction of the flow and ultimate destiny of all the mucous discharges in the normal nose, is the slanting position of the three turbinated bones and therefore of the three meatuses. These three bones and cavities all lie obliquely from before backwards and above downwards, and even the floor of the nose in the erect position of the head is inclined towards the pharynx although it is the least oblique of the meatal floors. The result of this structural arrangement is that the secretions slide backwards into the pharynx preparatory to passage down the œsophagus into the stomach. The sphenoidal sinus secretion in dependent positions of the head must also pass into the pharynx from the roof. The more watery discharges from the upper regions and accessory cavities will tend to flush mildly the more viscid secretions lower down on into the pharynx. The only secretion passing into the nose that might have a chance of escaping passage back into the pharynx is that from the lacrymal apparatus which is more or less constantly flowing from the anterior position at which it enters; but the oblique inclination backwards of the nasal duct, the valvular fold at its abutting point, and the curved formation of the anterior part of the inferior turbinated bone, all tend to direct the flow pharynx-wards.

In the pharynx there are small groups of muciparous glands on the lateral and posterior walls in its upper part;

there are also a considerable number on the pharyngeal surface of the uvula; but below the upper level of the mouth, where the epithelium changes its character from ciliated to stratified, there are very few. There are also very few mucous glands in the œsophagus until nearing the cardiac orifice, where there are a great many rather large ones, intended doubtless to supply mucus to afford protection against acid regurgitation from the stomach. This paucity of mucous glands below the middle of the pharynx is explained by the fact that the dependent secretions from above are meant to be swallowed and thus to lubricate and protect the lower half of the pharynx and the œsophagus. Besides the special glandular arrangement for the mucous secretion there is a large quantity supplied also from muciparous cells scattered throughout the nasal and upper pharyngeal regions, wherever the epithelium is of the columnar type, many of which cells exhibit the goblet condition. In the mouth most of the mucus is supplied by the sublingual glands. The sub-maxillary being a mixed gland supplies a smaller quantity. There are also groups of special mucous glands—viz., the buccal, labial, molar, and lingual. The use of the oral mucus is doubtless that of facilitating the preparation of the food for deglutition and the maintenance of the cavity in a fit and moist condition.

That there is a considerable secretion of mucus in the nasal cavity and upper pharynx the study of their anatomy leaves no doubt, and that this secretion is far more than is required for the purposes of lubrication or for its special function of keeping up the moisture of these parts by virtue of its hygroscopic properties cannot be questioned. I maintain that this abundant mucus is swallowed, is normally intended to be so swallowed, and that in this manner not only is the œsophagus continually protected and lubricated, but that the ultimate function of this deglutated nasal mucus is to assist in protecting the stomach, more especially the pyloric portion (to which it immediately gravitates), against attrition by lumpy food and irritation by the acid gastric juice. It also helps to act as a natural laxative.

The nearly vertical position of the stomach, especially in its cardiac part, necessitates the gravitation of the swallowed mucus to the pyloric end where it is most required on account of great mechanical strain thrown on this part and the irritation caused by the acid juices. The cardiac portion has only feeble contractile power compared with the part beyond the so-called prepyloric sphincter, in which the muscular power is very great indeed. This differentiation between the two parts of the stomach, both anatomical and functional, is not sufficiently taken into account when studying their respective liability to disease, more particularly irritation and ulceration. Immediately on passing through the cardiac opening the epithelium changes its character again from stratified to deep columnar, and what is a very striking fact will be noticed—that every cell on the gastric surface is an active mucous gland pouring out its secretion over the surface, thus saving the sensitive walls from irritation and digestion by the gastric juice. These surface cells also line the mouths and necks of the gastric glands.

The functional differences between the two parts of the stomach is carried out not only in their musculature but in the nature of the glandular secretion, the cardiac glands giving out acid and pepsin and the pyloric ones pepsin alone. The mucous membrane at the pyloric part is much thicker than at the cardiac part, and the surface cells extend a much greater way into the wider openings of the glands than at the cardiac end, the mouths of the glands being always plugged with mucus. There is also another histological distinction at the pyloric part, in that there is a special readiness on the part of the new cells, intercalated between the deeper parts of the surface cells, to take the place of the old ones as they become rubbed off or worn out—young cells being found growing rapidly in the deeper layers. This is always an indication of special functional activity—in this instance of the goblet cells on the surface being quickly replaced as they are so soon worn out in mucus formation, again emphasising the need of much mucus at this part.

In the small intestine, with a capacity three times that of the stomach and four times that of the large intestine, the surface epithelium has the distinctive features of a striated border, stamping this as the chief absorptive part of the intestinal tract, far exceeding in this capacity both the stomach and the large intestine. The other marked feature in the lining membrane of the small intestine is the sparseness with which mucous cells are found. There are only a few goblet cells found scattered over the villi, a few in the glands of Lieberkühn, these Lieberkühn glands being interspersed like test-tubes in a stand between the villi; this is in great contrast with the large number of goblet cells seen in the Lieberkühn glands of the large intestine, where as many as 40 are commonly found in one gland. The mucus in this part of the canal—the small intestine—is an imported supply. From the stomach much is propelled onwards with the gushes of the chyme—from the pancreas in its very viscid secretions, and from the liver with its specially large supply in the bile, derived from tarrying in the gall-bladder and passage down the bile-ducts. The amount of mucus discharged into the small bowel, therefore, is very large—larger than in any other part of the bowel—but this is almost entirely derived from surrounding organs. That this is so, and that here the digestive processes are still carried on very intensely and actively, are important factors in their bearing on its pathology. The only other point I would like to emphasise about the anatomy of the small intestine is that the solitary glands and Peyer's patches, which are so liable to become the seats of ulceration, have only a single layer of protecting epithelium over them and that they are more liable to friction and irritation since they bulge up the surface somewhat and thus project into the lumen of the canal.

In the large intestine very great provision for mucus supply is met with, vast numbers of goblet cells being placed over the surface and in the glands of Lieberkühn throughout this tube. For lubricating and protecting purposes this is very essential, as the contents now become solid in consistency. I would here only further remark that while this is so in the large intestine—the vestigial part of it—the appendix has very few Lieberkühn glands and these are almost destitute of goblet cells. Mucin is the substance that gives the sliminess to mucus. It is found in many situations both in the cells of mucous glands and in goblet cells. It is also the chief constituent of the cementing material between cells—tissue mucin. There are probably several mucins. They are of a colloid nature, viscous, soluble in alkalies, but precipitable from such solutions by acetic acid. On boiling with dilute mineral acids they yield a substance which reduces Fehling's solution. Mucin is also found abundantly in such slimy animals as snails. It has been specially investigated in the jelly-like connective tissue of the vitreous humour, Wharton's jelly, and in tendons. By appropriate processes mucin is broken up into a carbohydrate called "animal gum" and a nucleo-proteid, and the unanimous opinion of physiologists is that mucin is not broken up in the digestive process, but that resisting them all it passes by the bowel unchanged. Some mucus may be broken up in the small intestine, however, and the great additional supply in the large intestine would support this supposition.

The solution of many of the pathological problems presented by the stomach which have perplexed the medical mind so long and so much is, I think, wrapped up in the solution of that other puzzling proposition, Why does the stomach not digest itself? which has hitherto never received a satisfactory answer from the physiologist. But what are gradual thinning of the surface epithelium of the stomach lining, multiple small erosions, either slight or to such a degree as to give rise to profuse hæmorrhage, ulcerations, few or many, superficial or deep, but the results of irritation first and then digestion and destruction by the potent acid gastric juice? This much is mostly agreed to be so by pathologists. But what preserves this superficial epithelium from solution if not the substance it secretes as mucinigen in the deeper parts of the cell body? This being rapidly changed into mucus which fills the outer part of the cell as a soft gluey plug resists gastric digestion and is poured, as a more or less thick layer, over the gastric surface. Any deficiency of this mucous coating must expose the deeper protoplasmic part of the cell-substance to the irritant and digestive action of the juice and also allow of its penetration into and between those cells, the prevention of which is very likely a further function of this mucus. A change has taken place in our views as to the functions of the stomach, inasmuch as it is not now considered to be a great absorbing organ, water even being mostly passed on into the small bowel, there to be rapidly taken up into the portal circulation. The principal action of the stomach consists in the completion of those processes of preparation for absorption begun in the mouth by the contents being churned and squeezed and triturated and by insalivation

and peptonisation being furthered, absorption being a subordinate function. That every cell on the stomach surface is a mucous gland is just what the organ's performances would lead us to anticipate—viz., absorptive duties much reduced in favour of mechanical work, when lubrication and protection from bruising by ill-masticated food and shielding from chemical irritation demand abundance of just such a substance as mucin. The stomach is said to resist self-digestion because its walls are living walls; and another reason assigned is that they are continuously being bathed in alkaline blood. But Bernard's experiments, in which he showed how the limb of a living frog even with its normal alkaline blood-supply was readily digested when projected through a gastric fistula into the stomach cavity of a dog, and that the ear of a rabbit when so introduced was digested (Pavy), clearly prove that living tissues are not thus resistant. It is singular that the epithelium of the pancreatic duct is not affected, although this juice is very active in an alkaline medium; but the explanation is probably the superabundance of viscid mucus in this secretion. Anything arresting the formation of mucus will lead to the digestion of the stomach walls. Thus the excised stomach of a recently-fed animal left in a warm chamber in a sufficient quantity of dilute hydrochloric acid will become completely digested (Waller's Physiology). An animal killed during digestion and examined a few hours later may be found with the stomach perforated by self-digestion and with more or less extensive destruction of the surrounding tissue (Waller).

It is interesting to notice in this relation that the margins of gastric fistulæ in man are readily attacked by the gastric juice, as also are the margins of gastric ulcers. In persons dying after a full meal and the body being kept in a warm place not infrequently the posterior wall of the stomach is found digested and even the contents may escape. Fishes are frequently found after death with their stomachs partially destroyed. Ligature of the arteries of the stomach causes, according to Pavy, digestive softening of the gastric mucous membrane, and he thinks that this is brought about by the removal of the alkaline blood, but this has nothing to do with the explanation, for the frog's blood is also alkaline in Bernard's experiments just mentioned, and the cells that line the pancreatic ducts are preserved from the pancreatic juice which is intensely active in an alkaline medium. The true explanation is that ligature of the arteries arrests the secretion of mucus from the cells of the superficial epithelium of the stomach lining, while the already acid contents readily destroy the wall, and the great amount of mucus in the pancreatic duct shields it from the active secretion pouring over its surface. Stewart and Bernard are the only physiological authors who assign to mucus its proper place and rôle. In his "Manual of Physiology" Stewart says: "A certain amount of protection may be afforded to the walls of the stomach by the layer of mucus which covers the whole cavity, for mucin is not affected by peptic digestion, and a mucous secretion seems in some other cases to act as a protection to the walls of hollow viscera whose contents are such as would certainly be harmful to more delicate membranes—e.g., in the urinary bladder, large intestine, gall-bladders, &c." Bernard says: "The thick layer of mucus may also aid in protecting the stomach from the action of its own gastric juice."

After full consideration of the foregoing anatomical and physiological facts, and having noted that patients with irritable stomachs, painful digestion, and hæmatemesis (gastric erosions or gastric ulcers) suffered simultaneously in many instances from the accompanying ailments of either dry or atrophic rhinitis and pharyngitis, together with the prominence of the symptoms of a clear non-mucous hyperacid vomit, constant constipation of the bowels often with dry scybalous stools, amenorrhœa and chlorosis, I was induced to try the use of mucin in an endeavour to supply the obviously deficient mucus. In my position as assistant-registrar at the London Central Throat and Ear Hospital, examining a great many patients, I have been surprised to find how in almost all cases of dry nose and throat there is also complaint made of long-standing and intractable gastralgia and constipation of the bowels, and another fact that I have verified at the same large clinic is that the incidence of these affections as regards age and sex is much the same. It is remarkable that dry and atrophic rhinitis and pharyngitis and gastric erosions or gastric ulcer are most commonly seen in young females of the domestic servant or indoor-labouring class between 17 and 30 years of age. There seems to be in such people and at such an age a special liability to desiccation of mucous membranes, beginning with lessened secretion and ending in more or less complete atrophy. This seems to be more often met with in the scrofulous, and is evidenced by dry nose and throat, these young women seldom using more than one handkerchief a week, while painful digestion, frequent vomiting after meals, constipation, amenorrhœa, and chlorosis are concomitant symptoms.

I will now give notes of a few of my cases treated with mucin.

CASE 1.—A woman residing in the country was sent to me that she might have special treatment, as all the ordinary remedies had proved futile. She had been under the care of Mr. Ray, late of Dulwich, on three occasions in the course of the five years for hæmatemesis, the last attack having been a very serious one, with much vomiting of blood and necessitating rest in bed and milk diet for one month. The diagnosis had been "gastric ulcer" and she had had painful digestion ever since the last illness. She was 34 years of age, very pale and emaciated, very weak and easily tired, and complained of want of strength, want of appetite, and pains after everything in the way of food—attacks of sickness and constipation. She had been very strictly dieted and practically starved, being afraid to eat. I found that the tongue was very clean and red and fissured and somewhat large and flabby-looking. The nose and throat were rather dry and the mucous membrane was thin and pale in appearance. She stated that she very seldom soiled a handkerchief. All her other organs were healthy. She had pain on pressure over the stomach and she stated that after taking food, even of a very light nature, she suffered great pain for some time and was often sick, the vomiting giving relief. I diagnosed the case as one of chronic gastric ulcer, the ulcer being most probably of considerable size and cicatrised over, with the edges liable to give way and to break down, thus accounting for the attacks of hæmorrhage. I prescribed tabloid mucin co. as prepared by Messrs. Burroughs, Wellcome, and Co., ordering three tabloid products just before food and three more just after food. The feeding was ordered to be carried out every three hours and to consist of soft food, especially Brand's essence of beef and thin cornflour made with milk. This was varied with calf's foot jelly, chicken and mutton jelly, and custards. There was no more vomiting and very soon the pain ceased, even after partaking of larger amounts of food at one time. In a week the patient was able to take a fairly good meal of chicken or fish, followed by custard or other light milk pudding. Her weight increased by eight pounds in six weeks. The number of tabloid products taken was gradually reduced from 24 per day to 16, which number was continued regularly for six weeks, and then as she was suffering no discomfort they were stopped as a regular thing and were taken only occasionally. With the help of a daily enema at first the bowels soon acted quite satisfactorily. When I last saw her she was quite well, although she had still to be careful of any indigestible article in her diet.

The following three cases were under the care of Dr. Hallam of Westminster and each made marked improvement under tabloid mucin co. These reports are from notes carefully kept by him.

CASE 2.—The patient was a girl, aged 18 years. She first sought medical attention on Jan. 19th, 1901, complaining of gastric pain after food and occasional vomiting. The ordinary medicines were prescribed, but at 2 A.M. on the following morning an urgent message was sent that she had vomited a chamberful of blood. Absolute rest was ordered for one week, and then she was allowed to get up, but she remained very weak, had no appetite, had much gastric pain, vomiting frequently after food, and was very constipated. She was now ordered two tabloid mucin co. products just before and two after each meal, the food to be taken every three hours. This treatment was kept up until the middle of April. Dr. Hallam says that "the pain and vomiting ceased very rapidly, and the bowels soon acted quite regularly," and that some time after he met the patient when she expressed herself as being in the best of health, having had no return of the symptoms, and stated that her bowels were now regular.

CASE 3.—The next case was that of a woman, 32 years of age, a thin, delicate-looking person, who complained of pain

soon after food, vomiting, and constipation. The tongue was clean and red. This woman had been quite incapacitated for two months and ordinary treatment had failed to relieve her. She was treated with tabloid mucin co., taking two tabloid products before and two after each meal. This was continued for a fortnight and the "bowels became regular and the pain and vomiting ceased and she was soon very greatly improved." This was evidently a case of irritable stomach or gastritis.

CASE 4.—The next case was that of a young lady who had had a great variety of treatment for acute gastric symptoms after partaking of food—gastric pain, sickness, nausea, and hæmatemesis. All the usual treatment had been gone through over a lengthened period but she had got no relief until put on tabloid mucin co. when she progressively improved.

Dr. H. Whittome of Camberwell used tabloid mucin co. in a case of "gastric ulcer" with good results. These are his notes: "The patient, a young unmarried woman, aged 28 years, came complaining of nausea, sickness, gastric pain aggravated by partaking of food, vomiting giving relief, and the passage of dark tarry stools. She had had only very temporary relief from soda, bismuth, hydrocyanic acid, and morphia and was therefore put on tabloid mucin co. These she took, two before and two after food, with cornflour, Brand's essence, and custards as diet every three hours; the pain and vomiting ceased and the bowels were moved twice daily. The tabloids were then reduced to half the number when improvement was still maintained, but the bowels only opened once daily. This patient took 250 tabloids in all. She kept for herself a very careful tabular record of the occurrence of pain, vomiting, colour of the motions, &c. A case of my own was very similar to this.

CASE 5.—A woman, aged 30 years, had long suffered from constipation and pain after food. She was a tall, thin, pale woman, with a clean red tongue and pale nasal mucous membrane and throat. I was asked to see her when she was suffering from a gastric attack with great pain, sickness, and vomiting tinged with blood, and the passage of tarry stools. I at first ordered absolute rest, ice to suck, a cotton-wool compress on the abdomen, Brand's essence of beef only for food, and tabloid mucin co., two tabloids every three hours. These had to be dissolved at first in a little warm *lime* water as she did not swallow them very well. She progressingly improved and was convalescent in a week and with iron preparations and tabloid treatment occasionally has kept well ever since—now six months ago.

These are only a few cases that I have made a selection of, but they are typical of the others. I have had 30 instances in which mucin has had a most beneficial effect. Several patients have had to have a second course of tabloid treatment in from three to six months after the first, and some have had to have the treatment extended intermittently over a lengthened period, but in all my patients its success has been remarkably good.

The tabloid mucin co. consists of five grains each of mucin and sodium bicarbonate. I combine the mucin with sodium bicarbonate because mucin, as found in all secretions in the body, is always (as in the saliva) associated with an alkali and is sent into the stomach with alkalies, therefore, and is soluble in alkalies. If this tabloid compound is dissolved in a little water in a test-tube and kept at the temperature of the body a sticky, gluey adhesive liquid is formed. Alkalies, therefore, are essential to the full and proper action of mucin. I make use of mucin also for douching the dry nasal mucous membrane as well as for swabbing out the desiccated pharynx. For this purpose I have the same tabloid product combined with one grain of menthol. This tabloid product is dissolved by rubbing it up with an ounce of warm lime water and the solution is then used by means of a nose-bont or a nasal syringe to wash out the nose; this is equally effective half as strong and suits some sensitive people better.

Mucin is hygroscopic but its influence is not so violent or so irritating to mucous membranes as, for instance, glycerine is, because, according to a research I have had carried out at the Laboratory of Clinical Pathology, 62, Queen Anne-street, W., it has only about one-fifth of its absorbent power for water, 100 parts of mucin absorbing 3·8 parts of water in four hours, whereas 100 parts of glycerine absorbed 16·3 parts in the same time. Mucin is thus much more mild and soothing in its influence and therefore a more suitable moistening application to the nasal lining than glycerine, the effect of douching the nose with this preparation being agreeable, the surface keeping well moistened for the whole day under ordinary circumstances. The douching may be repeated three times daily if desired, but in the majority of cases I find once daily quite enough to relieve the dryness and uncomfortable feeling.

How does mucin act? It acts by supplying what is deficient—viz., the protective, indifferent, non-peptonisable, and hygroscopic substance—mucus. By introduction into the gastric cavity first, before digestion begins, the sensitive ulcer or erosion or inflamed wall is covered over and shielded from irritation by the acid gastric juice, and by thus soothing the surface layer reflex secretion of the acid gastric juice is prevented, for it is believed that hypersecretion is thus reflexly brought about. It also doubtless acts by giving the epithelium resting time to recover itself and to revive and grow stronger, and thus to withstand the attacks of the acid contents—perhaps it allows the young epithelial cells time to replace their effete and broken up predecessors. Mucin, as the foregoing cases amply bear out, has undoubtedly a laxative action, thus acting much more valuably than subnitrate and subcarbonate of bismuth, both of which have hitherto been so much used under these pathological conditions, acting, of course, by being precipitated over the sensitive surface and forming a protective covering, but having the great disadvantage of causing constipation.

One of the leading clinical indications for the administration of tabloid mucin compound is the presence of a clean, red, angry, or dry tongue, frequently a clean, red, fissured tongue, indicating a deficiency of gastric protective coating, and this condition of tongue will often be found in association with a pale and thin, or a pale, thin, and desiccated, state of the mucous membrane of the nose and pharynx, or a semi-secretionless post-nasal and pharyngeal surface, as shown by hardly a handkerchief being used in a week and another almost invariable accompaniment—obstinately confined bowels. Now, just as in patients with deficient naso-pharyngeal secretion streaks and tracks of old and functionless mucus may be seen on the nasal and pharyngeal walls, which must be washed away by alkaline douches just before using the mucin compound wash, so in some of these stomach cases, when, as in the dry nose and throat, there is really a greatly diminished production of mucus, the tongue will be found sometimes rather coated and dry than always red and clean or red, clean, and dry. But if in association with this there is pain after food and constipation of the bowels, such a tongue indicates not too much mucus in the stomach as in catarrhal states, but really shortage of mucus, and it will be necessary, in order to remove old gastric mucus and to prepare the way for mucin, to administer first a saline aperient. Such a saline aperient I find in the tabloid mag. sulph. co. or a saline aperient water may be prescribed, such as that of Carlsbad. I carefully avoid peptonised foods or preparations or peptonised milk in the treatment of such cases of gastric irritation and erosion and ulcer, because they are unphysiological. For the first half-hour, and most probably longer, the acid gastric juice ought to be immediately neutralised as it is secreted by union with alkaline salts introduced in the food, but chiefly by uniting with the proteids of the meal; this is essential so that the amylolytic process may proceed. It is of supreme importance that such neutralisation should take place in all irritable and ulcerated states of the stomach surface unless the exposed and hyper-sensitive parts are to be worried by the free acid, thus causing pain and inducing vomiting. Therefore, the administration of such prepared foods is to be avoided, and I find that as soon as a patient can retain such a proteid as essence of beef or fresh meat juice the pain becomes much less and I relegate the use of such prepared foods to cases of worn-out stomach in the aged.

Welbeck-street, W.

MEDICAL SERVICE AT ST. LUKE'S CHURCH, LIVERPOOL.—The Lord Bishop of Liverpool has signified his intention of preaching a sermon to the members of the medical profession at St. Luke's Church, Liverpool, on Sunday, Oct. 20th, at 3 P.M., being the nearest Sunday to St. Luke's Day. The President of the Liverpool Medical Institution has tested the feeling of members of the profession as to the desirability of their attending the service in academic robes with the result that a majority decided against the proposition. 84 gentlemen have already signified their intention of being present at the service and it is expected that a much larger number will attend. Should this new departure in Liverpool prove a success it is proposed to make the service an annual one.

CANCER, ITS NATURE AND ITS TREATMENT.

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I HAVE just finished reading Professor J. G. Adami's address on the Causation of Cancerous and Malignant Growths, an excellent dissertation on the biology of the cell, but one that makes no effort to explain—which by its heading we might have expected—why tumours become malignant. This is a question which the professor of pathology himself asks and I should have been surprised if he could have answered it or even suggested an elucidation. It seems to me that the cause of malignancy can be fined down to one of two things: either the loss of, or a chemical change in, a secretion—the latter for choice—or else it is due to parasitic invasion. Nothing else seems to fit into the environments or clinical features of cancer, its variability, its persistence. Constant irritation, Cohnheim's suggestion, morbus miseriæ, each have had their advocates and their day.

What are the arguments adduced in favour of the parasitic nature of malignancy—"infectivity"? In the absence of the production of a specific microbe the whole matter hangs on the question whether cancer may be conveyed or not. On the one hand, we have the fact that for generations surgeons, pathologists, and nurses have been in the habit of freely handling living and morbid specimens with complete impunity. Until recent years I do not think I ever remember anyone even suggesting that the disease was contagious, and instances are not uncommon where husbands have had regular connexion with their cancerous wives without any ill effect to themselves. In fact, it occasionally happens that the first indication of this dreadful malady is hæmorrhage and pain after coitus. I can recall to mind two instances at the present moment; one occurred 20 years ago and I often see the husband about in the streets. That is one side of the question. On the other side we learn that cancer is increasing in frequency. There is evidence that the malady is occasionally "localised" and that its recurrence is shown by statistical returns as intensified in certain places. These are houses built on alluvial soil, bends of rivers, and low-lying lands subjected to inundations. It is said that some buildings can even be designated as cancerous on account of the number of deaths that have taken place within their walls. Now, of course one cannot say that this is incorrect, that such is not the case; statements like those which appeared in the Cancer Number of the *Practitioner* are not to be denied by any direct evidence. Moreover, the statistics may be perfectly correct, but that does not show that the disease is microbic. For instance, just the same results might be obtained if the malady was due to such a local cause as a defect in the water-supply.

"Localisation"—the fact that in some parts of the world one valley will teem with the diseases that result from the loss of the ductless gland secretion, while on the other side of the mountain the surroundings being, for all that is known to the contrary, exactly identical, gland trouble is scarcely to be found—is used as an argument in favour of infectivity. With respect to certain low-lying lands and alluvial deposits being favourable to the dissemination of cancer, many years ago, when I first arrived in Victoria, malignant diseases were frightfully prevalent all over the goldfields. Now, from Ballarat to Dunolly, which in one direction takes in nearly the whole of the gold area, there is not such a thing as a river, as the word is commonly understood. Of course, there are creeks which carry away the surface-water in winter, but alluvial valleys do not exist and, as is well known, we have no malaria. The whole country is a volcanic plateau, off which the rain courses almost as soon as it has fallen. Yet this was a veritable home for cancer, the formation of the country and its geology being exactly the reverse of what we are told should be a malignant corner. In those days we attributed the prevalence of the disease to drinking rain-water caught from the roofs of the houses and immediately run into galvanised iron or cement-lined tanks. Naturally the water was very soft, and to this day I have a notion that the idea is not wholly wrong and that there is much in the contention that the constant drinking of demineralised water is provocative of cancer. At all events, it is a sounder proposition to my mind than the theory which attributed the disease to the presence of a microbe that nobody has been able to find.

With reference to the inoculation experiments, what are they worth? Small neoplasms or inflammatory nodules may arise, though I question if the first really do, but I know that when I read the results of the experiments the impression left on my mind was that the tests were a failure. Certainly the inoculations did not take in anything like a satisfactory manner and they did not set up cancer.

The certainty of cancer being a curable disease several years ago was brought to my attention through meeting with a singular instance of spontaneous recovery. If anybody had related the story to me I should have told him at once that he had made a mistake in the diagnosis and I always expect the same measure to be meted out to myself. I saw the case first in company with Dr. Lawrence of Melbourne. The man had had two operations performed upon him, one the ordinary V incision of the lip and the other a similar but more extensive proceeding very nearly on the site of the first cicatrix. The disease had returned, and when we visited him the right jaw had become extensively involved. His mouth was filled with the tumour, an infiltration had occurred—that is to say, the disease had extended to the sub-maxillary gland, so that no operation was admissible. That man, save that he shed his lower jaw piecemeal—not as one sees in actinomycosis, where the bone shells—recovered perfectly and was alive eight years afterwards, when he was accidentally killed at a railway crossing of which he was the gate-keeper. During the interval I saw him repeatedly, though I never recognised him as my former patient, and it was only a few days before his death that I heard the sequel of the case. Happening to meet the widow—the wife then—she told me who she was, and related how the bone came away, and so forth. She was under the impression that we had done something to effect this cure. At all events, I learnt from this case that cancer is a perfectly curable malady. If it could only be found out what went wrong, the remedy was probably close at hand. Now about this time the columns of THE LANCET were filled with the accounts of myxœdema and its connexion with a gland that until the present had been considered of no value, an unimportant lump of tissue pertinent only to fœtal life. In reading the discovery and the symptoms of thyroid disease I thought that I saw the likeness between it and cancer and that probably the two were allied to one another in very close relationship.

A large majority of the people who suffer from gall-stones die from malignant disease. Mayo Robson, to quote one authority, observes this, and I think he puts the percentage as high as 87. Others mentioning this fact write of cholesterine irritation as if the disease was an inflammatory one. How can cancer be the product of constant irritation? If such were the case other calculi than the smooth, round, greasy gall-stone should give rise to similar effects, and we know they do not. A renal concretion will disorganise the kidney, cause abscess, and play as much mischief as possible, but the last thing one associates with these lesions is cancer.

Cancer is not communicable and yet is auto-infective. I think that this is generally admitted; it requires no reference to authorities on my part. But what does it mean? It implies that A, a non-cancerous man, is protected against the disease which B, a cancerous man, has got; or, in other words, that A possesses and still retains something that B has lost. Thyroid gland secretion has some action in cancer. I gave it years ago when the tabloids were first introduced by Messrs. Burroughs and Wellcome on several occasions. As a rule, one might just as well administer peppermint water, but sometimes it has a surprising action. I remember one patient who was, I really thought, going to recover. After a time I lost sight of her. She made a marvellous improvement for some weeks whilst under my care, but funds running short she had to return home. I read of a case in THE LANCET in which recovery actually did take place under the thyroid gland treatment.

Let me now ask two questions, the purpose of which will shortly be seen. The first is, What occasions the peculiar and offensive smell in cancer? It is one *sui generis* and is never smelt except when the disease is active. It is not due to sloughing, for ether injections, though dreadfully painful

for half a minute or so, will entirely remove it and yet the process continues. Its disappearance is the first indication that an ulcerative cancer is healing, though it may take considerable time for the decayed tissue to come away. The next question I wish to ask, is, Why does a cancerous patient die? Why does he waste so? It is replied, "By septicæmia, pleurisy, the effects of tumour pressure." Yes, these are concurrent affections which may or may not cut short life, but if none of these happen and infiltration is not extensive he will die from exhaustion. But why? I operated once on the lip of a man, aged 32 years. In five weeks the disease returned in the cheek; he very sensibly refused further operation and in 10 weeks' time he died, the whole illness lasting four months. He had no pneumonia, no pleurisy, no rise of temperature beyond just a degree from the beginning to the end, no suppuration to speak of, no extensive transposition of cells, for none of the glands were involved, and yet the disease ran as rapid a course as I have ever seen it do. I could call to mind one or two other cases similar to this. What caused the wasting and exhaustion that preceded death? I must ask that three postulates may be granted to me, only the last of which will require any comments:—1. All secretions must have their uses. 2. Consequently the loss of any secretions, save such as are only provided for temporary requirements, e.g., milk, must mean some sort of disorder. Glandular provisions vary as their nerve-supply is stimulated or repressed, but there is always a certain limitation beyond which *plus* or *minus* must be followed by some derangement. 3. All reproduction is subject to control, or else given nutrition it would be indefinite. This law is as universal as that of gravitation and applies as much to the cell and the fibre as to anything else, be it a sheep or a salmon. Now, in obedience to this law there must be something that regulates the proliferation of the cell. It can only be a secretion, subjected to a higher power.

Again (1) ultimate tissue elements are cells and fibres; and (2) cancer is uncontrolled proliferation of the cell. Now if one ultimate element can lose its reproductive inhibition it stands to reason that the other can do the same. It is a natural consequence, and if it were otherwise nature would exhibit a partiality which she never elsewhere evinces, so that we should expect to find some disease that corresponds to cancer, and that is exactly what we have in myxœdema which is uncontrolled proliferation or cancer of the fibre. Consequently we have three forms of cancer (I think a fourth should be added, but let that pass for the pre-ent): (*a*) carcinoma, uncontrolled proliferation of the cells, derived from the hypo- and the epi-blast; (*b*) sarcoma, *idem*, ... cells derived from the meso-blast; and (*c*) myxœdema *idem*, ... fibre. Is not posterior mediastinitis a form of local fibre cancer?

When we evaporate bullock's bile—or that from a dog is perhaps better, on account of the latter being carnivorous—at a certain stage in the proceeding we notice the presence of a soap. Having separated the mucin and lecithin, and removed the colouring matters, there remains a very sticky reddish substance which consists of a bitter principle, animal gum, a soap, and, if the filtering has been done while the alcohol was hot, some cholesterine. Now, we always meet with cholesterine in its crystalline form—that is to say, when it has become a morbid product. Of course, in the economy it is in solution and is kept in this condition by its natural aqueous solvent soap. It is the loss of this soap that permits cholesterine to separate from the living cell and cell-cancer to start. The uncholesterine cell is the uncontrolled cell, and here, perhaps, comes in the connexion of this disease with the constant drinking of demineralised or rain-water. The red material referred to above is termed in text-books "sodium-glyco-cholate" and "sodium tauro-cholate." It does not matter what it may be called, its animal constituent forms a soap with the sodium salt. If the hands be washed with it it will soon be seen that it is a soap. The "Dictionary of Solvents" mentions soap as the solvent of cholesterine, but this was not shown to me until the patient in my second case had recovered. When I came first to think seriously about cell proliferation I thought the control might be cholesterine, and in one case I injected that substance dissolved in ether—a very thoughtless thing to do, I must admit, for of course when the ether is evaporated the crystal re-appears, is absorbed, carried into the blood current, and in this form is eliminated by the kidneys, turning the urine into a vivid red. Of course, benzine and chloroform cannot be employed subcutaneously and it was a long time before it struck me that soap was the aqueous solvent. My first impression was that cholesterine was the control, that it was in some way lost and if one could restore it by the hypodermic method some good might accrue. Accordingly I dissolved, or thought that I dissolved, some crystals in soap and administered thyroid secretion, injecting at the same time, only in a different place, seven and a half grains of gum that had been crystallised in ether. I thought that by administering thus the whole of the bile secretion, if I got any results I could afterwards discard any constituent that was useless, testing each in its turn. (By-the-bye the notion that one cannot inject animal gum is erroneous. I have used as much as 15 grains without the slightest effect, beneficial or otherwise. From this I conclude that it is only a vehicle and in the treatment of cancer of no consequence. But to proceed.) The first case on which I tried this solution was an instance of epithelioma of the face. The patient, a woman, aged 76 years, had had this ulceration more or less for two years and when seen by me it was nearly of the size of a florin. It had been operated on, I think twice, by Dr. Barrett of Glenferrie, a suburb of Melbourne. After one proceeding it had healed up for a space but it broke out again shortly afterwards. He had scraped it, cauterised it, and used electrolysis. These failing he kindly passed the patient on to me. The injection answered splendidly, the ulcer quickly taking on a healing action and in a month it was well. The next instance was one in the Austin Hospital for Incurables. This man had had half of his lower jaw removed, secondarily to the lip incision the whole of the side of the face. After the second operation I used soap and cholesterine, the same solution as before. All this time I was under the impression that the active agent was cholesterine and that I had the latter dissolved, but it could not have been so for I had not broken the crystal up and unless it be crushed it will not dissolve. I suppose it must have passed into suspension only, for the iodine and sulphuric acid test gave it beautifully. For six weeks this man improved marvellously, when I conceived a way of dissolving the crystal so that the soap really took up a considerable quantity of cholesterine and I innocently injected this new solution as an improvement on the other. The results were most disastrous. The disease returned with extraordinary rapidity, and in a short time he passed away without pain or much stench. I then got hold of a breast case in an old patient of mine who, on my explaining the nature of the case, gave me *carte-blanche* to treat her as I liked. I showed the case to my neighbour, Dr. J. Jamieson, before I commenced dealing with it. His expression was, "Well, there's no doubt about that," nor was there. There was a tumour of the size of an orange which had been painless until recently, when the patient began to get neuralgia in her arms. The tumour, which was of two years' growth, was firmly attached and the nipple was deeply retracted. I injected soap, in which I thought I had dissolved some cholesterine, but as I have said, I must have been in error, and gave thyroid. This time I discarded animal gum. In less than six weeks the whole tumour had disappeared, leaving a firm cicatrix, and this fibrous tissue in its turn dissolved, so that in three months after the commencement of treatment one would hardly have known that there had been any disease at all; a little nipple retraction was all that was left. As I do not belong to any medical society I showed this case privately to my friends. Well, naturally everybody remarked, "Was it cancer?" Notice the sequel. For 15 months the breast remained perfectly sound, when one day the woman returned and showed me a rather suspicious skin spot. I injected it and in a few days to my surprise a slough came away leaving a malignant, stinking ulcer of the size of a half-crown, with a very dense base. I must say, for my own part, that I was rather glad to see this, for it was an absolute proof, if anything was wanted to confirm my diagnosis. By the same treatment, that is to say, soap and thyroid, this breast has completely healed for the second time. I must claim this instance as the first primary cancer of the breast successfully treated. After this I got a case of epithelioma of the hand from Dr. J. H. McGee of Melbourne. By this time I thought that I had perfected my solution, getting so much as half a grain of cholesterine to dissolve in half a drachm of soap solution, but when I came to try it in this case I failed most signally. Adhering to the cholesterine I failed again in a breast, but towards the close of this case I recognised

one error, but too late to save the patient's life, for she passed away peacefully without pain or stench or any other discomfort. This was rather a hopeless case from the first, for besides the malignant disease she had renal trouble and an ununited fracture of the thigh, and she was very old and feeble. Again I failed in a case of general cancer, although this time I only used the soap solution, without thyroid. Then came a rodent ulcer in a young woman 26 years of age. It was of 11 years' duration, and had been twice removed and once grafted. It was situated right in the middle of the forehead. This patient completely recovered in six weeks under the soap solution and thyroid per os. A big scar remained, and as it was healing the treatment was rather painful. Then I failed in a non-infiltrating epithelioma, again on the side of the nose and cheek. Here I did not give the thyroid, for with the peculiar wilfulness of some of the patients in these cases the man would not take it, but I do not know that I should have succeeded, for in neither of the two cases where the growth has started from the bone have I managed to effect a recovery. Then I had a case of epithelioma of the hand, a small thing of the size of a florin perhaps, and seemingly not attached to the bone. This did beautifully. The next case was an epithelioma of the tongue; the soap acted excellently, but on account of the extensive heart disease from which the patient, an old man, suffered and his generally exhausted state, I dared not use thyroid. I tried the general injections at first without effect, but he collapsed so after these that I had to abandon them and to revert to local insertions. He died, but absolutely without pain or smell; he just slipped into death, though extremely wasted, as a child will fall asleep in his mother's arms—a beautiful euthanasia. Fancy one dying from cancer of the tongue without pain or stench. The same happened in another very advanced instance in which the tongue, lower jaw, palate, and tonsil had been removed. The action of the soap was here most marked, although the man has not recovered, though as I write these words he is not dead, but on account of so much of his face having been removed the taking of food is a great difficulty. When I first saw him the whole of the interior of the mouth and cheek was one mass of cancer. It was extraordinary how he could live with such an extension of the disease. All smell and discharge have gone and he suffers no pain. I look on this as my champion case. I must instance one other case of recurrent epithelioma in which the patient died from an over-dose of soap solution. Until quite recently I thought that this preparation was a perfectly innocent one, of which any quantity might be injected with impunity. But such is not the case, for in the course of the treatment I gave this man two drachms at one time and he collapsed and succumbed in 24 hours. The soap solution should be just thick enough for blowing bubbles. Of course, it should always be boiled first and delivered warm. It is apt to occasion very painful spots, which look exactly as if an abscess were going to form, but if they are left alone in a couple of days all the tumefaction disappears, but meanwhile they are rather tender. Still they never do come to pus. I rather like a biggish inflammatory areola. Never more than a teaspoonful should be administered at a time, for, as I have related, injections are not absolutely without danger. If more is given shivering and collapse may occur. Another precaution is never to inject in one's own house unless means can be provided for the patient to lie down for an hour or two afterwards. To anticipate the shivering a morphia injection is advisable. It is always well, I think, to employ an anæsthetic, nitrous oxide for preference. If something of the sort is not used patients dread the needle and accordingly suffer in expectation and shirk treatment. At first I inject every other day and as the case improves less frequently until once every week or 10 days suffices. A very good soap to use is the superfatted soap prepared by Messrs. Allen and Hanburys, but for that matter common yellow bar soap will do. A bit should be dissolved in boiling distilled water and then strained through silk or closely woven calico. There are always some particles of dirt which might go through the needle and easily set up an abscess. In the many scores of injections which I have given I have only on two occasions set up an abscess. I have never yet managed to effect much good where the growth or ulceration started from the bone.

If I were asked what is malignancy I would reply, It is the crystallisation of cholesterine from the *living* cell. I do not imply that there is any deficiency of cholesterine in the economy, but the cell has acquired the habit of passing it out of solution. That cholesterine in this disease is at fault the smell alone shows and this is why ether injections—shockingly painful—will deodorise an ulcer so well and for a time give such satisfactory results in respect to sweetness, but the odour returns, not, however, for a day or so. I once went very much astray with this will-o'-the-wisp. In carcinoma both tissue elements are represented, so the thyroid secretion is imperatively indicated, and I believe that the sole action of this body is to control the proliferation of the cell and that its action on metabolism is a snare and a delusion.

In conclusion, let me add that I hope some of the readers of THE LANCET will, in good faith, give my treatment a trial. It is rather in embryo, but in my hands it has given results far better than I ever anticipated.

Melbourne.

A COMPLICATED CASE OF PLACENTA PRÆVIA.

BY JOHN HOOLE, M.R.C.S. ENG., L.S.A.

THE patient was a married woman, aged 38 years. She had had six children born alive, and with the exception of the fourth pregnancy all her labours had been normal. At the fourth pregnancy the child presented in an abnormal position and the medical man had to resort to turning to deliver her. On July 13th, 1900, about 6 P.M., I received a telegram requesting me to attend the patient, who lived at a distance of five miles. I was told, on my arrival, by an old midwife, that the patient had gone her full time, but that about 4.30 P.M. of the same day she had been seized with violent pains in the abdomen; this was accompanied by profuse hæmorrhage which had continued. Also, that two months previously, some hæmorrhage had occurred which continued more or less until the present time. I was informed that the patient had persistently refused to see a medical man.

I found the patient in bed, lying on her back, in an upper room of a thatched cottage. She was blanched, restless, and slightly delirious, and muttering abuse at the midwife. Her pulse was hardly perceptible, and the abdomen on inspection was wider and flatter than in normal cases of pregnancy. The external genitals were obscured from view by a large blood-clot, which was continuous into, and entirely filled, the vagina. The bed-clothes, bedding, and floor plainly told that profuse hæmorrhage had occurred. On examination the os was dilated sufficiently to allow the tips of two fingers to be introduced, but it was rigid and unyielding. The placenta was completely presenting and there was slight hæmorrhage into the vagina. No uterine action was taking place. The husband, being informed by me of the serious condition of his wife, sent for Dr. B. E. Dalison of Puddletown to assist me. Pending the arrival of that gentleman I administered chloroform and separated the placenta from the uterine wall with my two fingers as far as I could reach in a circle; this necessitated much force to dilate the os. I also gave repeated enemas of hot saline solution. On Dr. Dalison's arrival, after consultation, we agreed, considering the great loss and serious condition of the patient, to deliver her with forceps, as a round, hard substance could be indistinctly felt through the placenta which it was thought might be the head of the child. The patient being again put under chloroform the forceps were applied, force being used to intr duce them. They were locked, but on traction only a large piece of the placenta was brought away. On further examination a leg was felt; this was brought down and after considerable time and great difficulty, in which severe force was used, a dead child was born. The remainder of the placenta was removed and the uterus contracted without any more hæmorrhage. Small quantities of hot milk with brandy were administered to the patient at intervals during the night. I attended her daily and she was douched with solutions of perchloride of mercury. The temperature never rose above 102° F. and in a fortnight she was convalescent, taking appropriate nourishment and a mixture of quinine and iron.

If I may suggest the points of interest in the case, they are the great loss of blood, the considerable force that had to be used in dilating the os, first by our fingers and

afterwards with forceps, together with the rapid dilatation of the passages in delivering the child, and the subsequent absence of any nervous or septic symptoms.

Throgmorton-avenue, E.C.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF DEPRESSED FRACTURE OF THE SKULL FOLLOWED BY OCULAR SYMPTOMS.

(Under the care of Mr. A. WILLETT.)

SYMPTOMS connected with sight are rare in head injuries, if we put aside paralyses of the extrinsic muscles of the eye. In the case recorded below the left occipital lobe was lacerated, and as a result there was a partial right hemianopia. This is the condition that might have been expected from a lesion of the occipital lobe on the left side. The great improvement in the extent of the field of vision is striking. For the notes of the case we are indebted to Dr. G. V. Bull, late house surgeon.

A man, aged 48 years, was, on March 14th, 1901, admitted to St. Bartholomew's Hospital, under the care of Mr. Willett, having fallen 30 feet down a lift shaft and struck the back of his head (apparently on an edge). On admission he was conscious but did not remember his accident. He was cold and collapsed and was bleeding profusely from a wound in the occipital region in which depressed and comminuted bone could be felt. Both pupils reacted and there was no sign of paralysis. The pulse was 120 and regular and the temperature was 97° F. No injury to the spinal column could be made out. The wound was examined three hours later, a flap of skin being turned back on the left side of the skull. A gap was then found in the skull extending from the occipital protuberance upwards and slightly to the left for about three inches and being from one-third to two-thirds of an inch wide. In this gap there were fragments of bone and lacerated brain substance (left occipital lobe); the fracture extended as a linear fracture both upwards and to the base. The superior longitudinal sinus was intact, as was also the tentorium. The fragments were removed by forceps and one piece of bone at the upper angle was elevated. The wound was irrigated with boric lotion, the skin was sutured with fishing gut, and a wire drain was inserted at the lower end. During the night the patient was very restless and the pulse was weak and very irregular. On the next day he was better, the temperature being normal and the pulse 120 and regular. He complained of great pain in his back and was unable to pass urine. His knee-jerks were much exaggerated, but there were no ankle clonus and no affection of sensation. The wound was dressed on March 22nd and was found to have healed; the scar was pulsating strongly. On April 15th he was up and walking about. He was then able to pass urine. He was free from headache and from giddiness except on sudden change of position. He complained of inability to see objects to his right. No change in the fundus was made out, but Dr. Bull was unable at that time to test him with the perimeter. On April 20th the patient left the hospital and was not seen again till July 16th. He was then improved in every way and he said that his sight was better and that he could read better. The perimeter showed a partial right hemianopia, the lower quadrant of the fields of vision being lost. There was no change in the fundus. The pupil did not react when light was thrown on the affected part of the retina. He complained of pulsation in the scar and weakness in his back. On Sept. 12th Dr. Bull saw the patient again. He still complained of the pulsation which he felt but did not hear, but it was less marked. The perimeter showed improvement, especially in the right eye, and there was no change in the fundus.

FIG. 1.

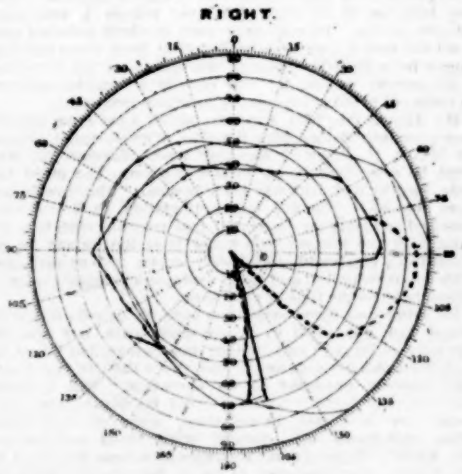
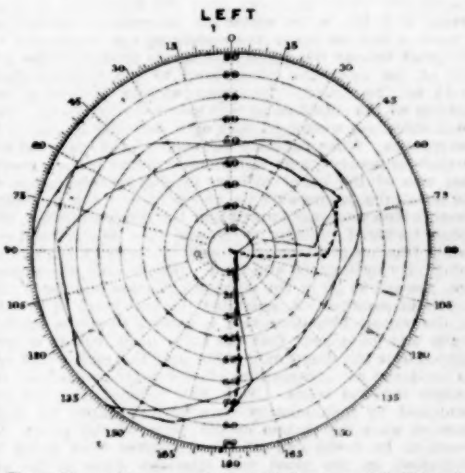


FIG. 2.



The continuous line represents the field of vision on July 16th and the interrupted line that on Sept. 12th.

Remarks by Dr. BULL.—The case is interesting on account of the almost complete recovery. The patient is now able to do six hours' light work a day and may reasonably hope to improve still further. I am indebted to Mr. Willett for permission to record the case.

BOLINGBROKE HOSPITAL, WANDSWORTH COMMON.

A CASE OF ACUTE DOUBLE INTUSSUSCEPTION IN A FEMALE INFANT, NINE MONTHS OLD; OPERATION 24 HOURS AFTER ONSET OF SYMPTOMS; RAPID RECOVERY; REMARKS.

(Under the care of Mr. THOMAS BRYANT.)

RETROGRADE intussusception is much rarer than the ordinary variety, and in the following case both forms were present. The occurrence of these two varieties in the present instance affords an insight into the method of

production of intussusception. In both forms in this case the transverse colon ensheathed the neighbouring bowel, so evidently the transverse colon had become for some reason greatly relaxed, so as on the one hand to allow the cæcum to pass into its interior, and on the other to slip over the descending colon and rectum. It is highly improbable that any inflation or injection can ever reduce a retrograde intussusception. By employing such methods valuable time is wasted and the exhaustion resulting from these attempts cannot but materially diminish the chance of recovery from a subsequent operation. This case is a forcible argument in favour of primary laparotomy for intussusception.

On August 7th, 1901, a female child, aged nine months, was sent into Bolingbroke Hospital, Wandsworth Common, by Mr. R. C. Kirby of Earlsfield-road, Wandsworth, with what he diagnosed as an intussusception. The child had been healthy and had not been weaned. The bowels had been regular. The day before admission at 3 P.M. sickness had suddenly appeared and had returned each time the child took the breast; four hours later the infant passed blood from the bowel mixed with mucus, and accompanied with slight straining, and these symptoms persisted at short intervals up to the time of admission.

On admission these symptoms were as described and the infant did not seem to be in much pain, nor was she seriously collapsed; one tumour was perceptible above the umbilicus and a second one in and above the left iliac fossa; both tumours appeared to be moveable. The abdomen was not very tense. Nothing could be felt in the lower bowel on a rectal examination, although the finger when withdrawn was covered with blood and mucus. Mr. Kirby's diagnosis of intussusception was confirmed by Mr. Bryant, who happened to be at the hospital when the infant was admitted, and an immediate operation was decided upon. It was performed at three o'clock on August 7th, about 24 hours after the first onset of symptoms, with the infant under the influence of chloroform. A median incision below the umbilicus was made and an elongated tumour was felt occupying the position of the left half of the transverse colon down to the rectum, which could not be brought into view without increasing the incision to the extent of an inch above the umbilicus. The small intestines were kept back with difficulty by means of flat sponges. When the colon was exposed and examined two distinct intussusceptions were clearly found to be present. One was of the cæcal variety, involving some inches of the ileum, the cæcum with its appendix, and the ascending colon, which were invaginated into the transverse colon, and reduced without difficulty by pressure upon its distal end and gentle traction at its proximal end, the body of the cæcum being very œdematous and hard. The second intussusception seemed to be in the descending colon and some four inches of empty colon separated the two seats of trouble. In the second intussusception a curious condition existed, for it was quite clear that the colon itself had as it were slipped over the descending colon and the rectum and had so produced an invagination of the upper portion of the rectum into the colon. This was reduced like the one described by manipulation from above, helped by slight traction upon the rectum at the brim of the pelvis, the proximal or cæcal end of the intestinal tract being invaginated in the usual way into the colon in the one case, and the distal or rectal end of the bowel being invaginated into the colon in the other. The invaginated structures were in both situations highly congested and œdematous, but otherwise they were normal. The parts involved were then cleansed and the wound was carefully closed with sutures, the peritoneum being included with all the other tissues in each stitch. The abdomen was firmly bandaged and the infant was allowed to take the mother's breast within an hour. The child had stood the operation well and was during the operation kept warm with blankets. Directly after the operation an enema of two ounces of warm milk was administered. No symptom subsequently appeared to cause anxiety. The temperature rose to 102·6° F. on the night of the operation but it steadily fell, and on the third day became normal. No vomiting occurred and on the day after the operation the bowels acted four times. There did not seem to be any pain. On the fourth day the child was fed by the bottle on milk-and-water, as the mother's milk seemed to be poor. On the sixth day the wound was dressed for the first time and was found to have healed. Everything subsequently went on steadily to a convalescence and at the end of three weeks the child was taken home, and when these notes were written two months later she was quite well.

Remarks by Mr. BRYANT.—This case is full of interest, and from the contrast of the two varieties of intussusception which coexisted is somewhat uncommon. The higher or cæcal variety presented no unusual conditions, but the lower form was most irregular, for in it the descending colon had evidently slipped over the higher portion of the rectum and had thus invaginated it. This fact also explains why in the case recorded there was but little tenesmus and why nothing abnormal could be made out from a digital rectal examination; for the tenesmus, which exists as a rule in the common form of intussusception and which is evidently due to the expulsive efforts of the ensheathing portion of bowel to expel the invaginated, was in the case under consideration non-existent. With respect to the treatment which was adopted the case reported must tell very strongly in favour of early operation, and Mr. Kirby must be cordially congratulated upon his action in sending his patient at once to the hospital for treatment, and in thus enabling me within 24 hours of its commencement to bring about by an immediate operation a reduction of the two intussuscepted portions of bowel, which it is very probable no other measure, such as inflation by air or the injection of water, could have effected, with its accompanying rapid and sound recovery. Such a case as this in an infant only nine months old terminating so satisfactorily, without one single symptom which could cause anxiety, cannot do otherwise than strengthen the view which I strongly hold that a strangulated intussusception should be dealt with, like a strangulated hernia, by immediate operation, and that no valuable time should be wasted by the adoption of any temporising measure. I am indebted to Mr. K. B. Alexander, acting house surgeon, for the notes of the case.

LEEDS GENERAL INFIRMARY.

A CASE OF ACUTE INTESTINAL OBSTRUCTION; REMOVAL OF THREE FEET OF GANGRENOUS GUT; RECOVERY.

(Under the care of Mr. W. H. BROWN.)

THE amount of bowel which may be resected without undue interference with the processes of digestion and absorption is difficult to determine. Dreesman[1] collected 26 cases in which more than a metre of small intestine had been removed, and six successful cases have been recorded in which more than two metres have been excised.[2] Four of these six cases had digestive disorders as a result of the removal of so much bowel, but the younger the patient the more likelihood is there that compensatory hypertrophy may occur and functional disturbances be avoided. In the case recorded below three feet of bowel were removed, so that no digestive troubles are likely to occur. The question of immediate suture of the cut ends of the bowel after resection for gangrene or the temporary formation of an artificial anus must always be determined by the general condition of the patient. The case also illustrates the value of continuous infusion of saline solution during an operation. For the notes of the case we are indebted to Mr. F. Stansfield, acting house surgeon.

A boy, aged 16 years, was admitted into the Leeds General Infirmary on March 29th, 1900, suffering from suppurative appendicitis. The abscess was opened and drained and he was discharged well on May 30th, 1900. On July 1st of the present year he was re-admitted with well-marked signs of internal strangulation. The general condition was very bad. Intravenous injection of saline solution was commenced at the time of the opening of the abdomen and continued throughout the operation. So soon as the peritoneal cavity was exposed a large loop of gangrenous small intestine was seen; this was brought outside the abdomen. The cause of constriction was a band fastening the bowel down to the side of the pelvis just beneath the site of the appendicular abscess. The band was cut through, the gangrenous bowel was cut off, and the severed ends of the healthy intestine were stitched to the skin. The pelvis, which was filled with dark, offensive fluid, was washed out and drained with a glass tube. The boy made a good recovery and on August 14th the integrity of the intestinal canal was restored

[1] Berliner Klinische Wochenschrift, 1899, No. 16.
[2] THE LANCET, Jan. 27th, 1900, p. 218.

by simple suture. The patient made a rapid recovery and is now (Sept. 24th) quite well.

Remarks by Mr. BROWN.—I have never before met with a case in which there was so much destruction of tissue where recovery followed. The condition of the patient was so bad that I did not expect him to survive the operation and but for the employment of continuous transfusion I am sure that he would have died on the table. Whether the pre-existing appendicitis was the cause of the strangulation I cannot say, but the point of constriction closely adjoined the former abscess. I did not attempt an immediate joining up of the severed bowel for two reasons: (1) the condition of the patient was far too desperate to permit of a prolonged manipulation; and (2) I am satisfied that in such cases it is far better to provide a free exit for bowel contents by making an artificial anus than to attempt to restore the continuity of the intestinal tract by any mechanical contrivance which lessens at the most critical time the calibre of the intestine.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

Leukæmia and Pregnancy.—Exhibition of Specimens.

A MEETING of this society was held on Oct. 2nd at 20, Hanover-square, W., Dr. PETER HORROCKS, the President, being in the chair.

Dr. G. E. HERMAN read a paper on Leukæmia and Pregnancy, reporting a case of his own, and 12 other cases already published elsewhere. Critical examination showed that in five of these latter cases the evidence of leukæmia was deficient. There were, therefore, only eight cases from which to draw conclusions as to the mutual influences of pregnancy and leukæmia. These eight cases agreed in the following points: (1) the presence of an enlarged spleen and liver caused patients with leukæmia to suffer more from the abdominal distension of pregnancy than healthy women; (2) the symptoms of leukæmia were aggravated during pregnancy; (3) in pregnancy with leukæmia there was a great tendency to abortion or premature labour; (4) death sometimes quickly followed the termination of pregnancy with leukæmia; and (5) if the patient survived the termination of pregnancy great improvement took place. Dr. Herman concluded from these facts that in pregnancy with leukæmia the induction of premature labour or abortion was indicated as a therapeutic measure.

Dr. AMAND ROUTH remarked that the paper was one of special value. As Dr. Herman had remarked, the combination was one of a blood dyscrasia with a condition causing pressure from the presence of a large spleen. It was therefore different from ordinary blood dyscrasias such as in other specific diseases and also from conditions causing simple pressure such as the presence of an ovarian tumour, and these facts imparted a special feature to the condition. There was a point not alluded to in the paper that he would like to ask Dr. Herman about—namely, as to the effect of leukæmia on the fœtus in utero. A good deal had been written on the transmission of diseases to the fœtus and it appeared that a process of filtration might be effected by a perfect chorionic epithelium, whilst a defective epithelium would allow of the transmission of disease to the fœtus. This was illustrated by cases of twins in which one fœtus was healthy and the other was affected with the same disease as the mother, such as cholera, glanders, malaria, erysipelas, and many of the acute specific fevers. Had any of the children of these leukæmic women had their blood examined after birth? He quite agreed with Dr. Herman's conclusion that premature labour should be induced when symptoms threatened to become urgent without waiting for serious developments.

Dr. A. L. GALABIN had met with one instance of the association of pregnancy with a disease as to which he was rather doubtful whether it should be classed as splenic leukæmia or so-called pseudo-leukæmia. There was a large splenic tumour reaching as low as the crest of the ilium, with extreme anæmia and tendency to hæmorrhage. But the relative proportion of leucocytes in the blood was only moderately increased, not to that extreme degree which was seen only in leukæmia. He had watched the lady for several years, and under treatment with arsenic and large doses of quinine the tumour somewhat diminished in size and the general condition improved. On one occasion she came for consultation, being about three months pregnant, and reported herself as feeling better. The spleen also seemed to have diminished in size since the pregnancy. He had had no experience of the effect of pregnancy on such a condition and feared grave results from the tendency to hæmorrhage, but in view of the actual improvement he did not advise interference at that time. The patient shortly afterwards went to France, and there it was decided to induce abortion before the child had become viable. He did not know whether the reason was the abdominal distension or the general symptoms. The result was that the patient died undelivered, and, so far as he could learn from the friends, the cause of death was hæmorrhage.

The PRESIDENT was surprised to hear how little hæmorrhage there was from the uterus in these cases of miscarriage during leukæmia. Hæmorrhages were common in this disease, and probably that accounted for the miscarriages, the bleedings taking place in the placenta and so destroying the ovum or fœtus. In some cases hæmorrhage occurred some time before the actual miscarriage and thus allowed certain changes to take place which prevented flooding. He understood Dr. Herman to advocate the induction of miscarriage or labour as soon as the presence of leukæmia was discovered, without waiting for any bad symptoms.

Dr. HERMAN said that the infant was not affected in maternal leukæmia. He advised induction of premature labour or abortion as a therapeutic measure only in cases in which the symptoms caused suffering and were aggravated after the onset of pregnancy.

The following specimens were exhibited:—

Dr. GALABIN: (1) A Sub-peritoneal Fibro-myoma; and (2) a Sarcoma of the Uterus.

Dr. HERBERT SPENCER: An Ovarian Cyst which ruptured three days after labour.

Dr. WILLIAM DUNCAN: (1) A Fibro-myoma of the Uterus; and (2) a Papillomatous Cyst of the Broad Ligament.

Dr. H. R. ANDREWS: (1) A Fibro-myoma of the Ovary; and (2) a Melanotic Sarcoma of the Ovary.

Dr. ROBERT WISE: A Volsella Forceps for Friable Cervix.

The specimens were discussed by Mr. RUMLEY DAWSON, Mr. ALBAN DORAN, the PRESIDENT, Dr. F. J. MCCANN, Dr. AMAND ROUTH, and Dr. T. G. STEVENS.

TORQUAY MEDICAL SOCIETY.—The new session was opened on Oct. 4th by an address from Dr. T. D. Acland, physician to St. Thomas's Hospital, on the Recognition of Certain Intra-thoracic Conditions which Justify Surgical Treatment. The address, which was illustrated by diagrams, was listened to with great interest by a representative gathering of the medical men of Torquay and its neighbourhood, the subject chosen being one which specially appealed to the professional instincts of the medical men of a south coast health-resort. Although coming from a physician it really was a plea for surgical measures in the treatment of certain conditions of intra-thoracic disease *after* a correct diagnosis had been made, the lecturer admitting, however, that in a few cases a correct diagnosis during life was not always possible.—In the evening Dr. Acland was entertained at dinner at the Queen's Hotel by the members of the society, Dr. William Powell, the President, being in the chair, and a most enjoyable evening was spent.

GLASGOW SOUTHERN MEDICAL SOCIETY.—The opening meeting of the session was held on Oct. 3rd in the rooms of the Southern Medical Club, 18, South Portland-street, Glasgow, Dr. William Watson being in the chair.—There was a large attendance of members and after some formal business had been transacted the meeting proceeded to the election of office-bearers, with the following result:—Honorary President: Dr. Thomas McCall Anderson. President: Dr. John Stewart. Vice-Presidents: Dr. Duncan Macgilvray and Mr. Thomas Richmond. Treasurer: Dr. Andrew S. Tindal. Secretary: Dr. John Fraser Orr. Editorial Secretary: Dr. Andrew Wauchope. Seal-keeper: Dr. Matthew Dunning. Extra Members of Council: Dr John Lindsay Steven, Dr. Hugh Kelly, and Dr. James Hamilton. Court Medical: Dr. William Watson, Dr. Ebenezer Duncan, Dr. Robert Pollok, Dr. Thomas Kirkpatrick Monro, and Dr. Alexander Napier. Representative to Victoria Infirmary: Dr. Charles E. Robertson.

ÆSCULAPIAN SOCIETY OF LONDON.—A meeting of this society was held on Oct. 4th, when Dr. Arthur T. Davies, the President, gave his inaugural address, taking for

his subject "Thomas Sydenham, M.D., L.R.C.P., 1624–1689." A full account of his life-work, his friends, his theories, and his treatment was listened to with much attention and interest.

Reviews and Notices of Books.

Memoirs and Letters of Sir James Paget. Edited by STEPHEN PAGET (one of his sons). London: Longmans, Green, and Co. 1901. Pp. 438. Price 12*s.* 6*d.* net.

MR. STEPHEN PAGET has done his work as editor so well that we have a book entirely worthy of the noble name which it commemorates, even where it is not from the pen of Sir James Paget himself. Nothing has been added that is unnecessary, nothing included that is uninteresting, and at the end of this book we are left with a clear continuous idea of a long and beautiful life. Our impression is as definite, as inclusive, and as exquisite as must have been that left by one of Sir James Paget's own lectures on a favourite subject. The biography of a great man is always the finest and most inspiring reading, and we can imagine no book more likely than this to fire the best ambitions of a young, or to sustain the labours of an older, medical man. Though only in part intentionally and in part incidentally autobiographical the final result of reading these memoirs and letters is a perfect idea of a singularly consistent and successful career. Yet it must not be imagined that Paget's success came easily or from the first. The consistency was in his unwavering determination and incessant work, a consistency that bore him with scarcely any intervals but those of illness through more than 60 years of effort. Besides the strength of will and power of work we are left impressed with the clear sense, the humour, the deep kindness, the honourableness, and the religion of Paget. There are few lives which bear as well as his the scrutiny of the private or the public observer. We see him through this book as devoted to his home as to his hospital, and as beloved and respected by his family as he was reverenced and appreciated by his pupils and his patients. James Paget was almost as fortunate in his parentage as were his own children in theirs. Of his father he writes in his Memoirs. "He had a very large family and as long as he could he treated them very generously and educated them expensively. I should give a very wrong impression of my father if I were to speak of him only as a man of business. He was in this an admirable example; punctual, constant in work, perfectly fair, liberal, and honest; even when he failed no one blamed him. But he was besides a thorough gentleman—cheerful, well-mannered, peace-loving, and hospitable; perfectly temperate, when frequent drunkenness was not deemed vile; refined in conversation, even when cursing and nastiness were scarcely vulgar; and a lover of all that was simply beautiful in literature and art." In writing of his mother's father, "a kind of self-elected fine gentleman," Paget shows some of that aptitude for description and that high humour which appear so often in his letters and which must have given much of their irresistible attraction to his lectures and to his private conversation. He writes of his grandfather: "I just remember him—a fine old man, grave and dominant, for whom all his daughters had so profound respect that, although I never heard of his having said or done anything very wise, I never heard of their having wished for anything less or other than he did. And their respect for him did not diminish when he was dead; though he left them nothing, unless it were the gout, of which my inherited share has had great influence on my life." Paget's mother was a worthy companion for his energetic and hospitable father. Nine of her 17 children grew up to full age. "She took the close charge and guidance of them all; she managed all household affairs; she collected 'everything'—autographs, seals, caricatures, shells, corals and agates, old china and glass, and curiosities of all kinds; and all her collections were orderly arranged and labeled in her own fair hand. She wrote I know not how many scrap-books and filled I know not how many albums." Till the age of 13 years James Paget was at a school which cost his father 8 guineas a year. At the age of 16 years he was so possessed of a desire to enter the navy that the uniform was actually bought, and it was only at the last moment that his mother's entreaties against letting him leave home prevailed. "I cannot imagine a happier escape," he writes, "for I cannot think of a calling for which I should have been more utterly unfit than for His Majesty's navy at that time." This was in 1830. The navy being abandoned young Paget was apprenticed "to an active, energetic, and well-educated practitioner in the town" of Yarmouth. Five years was the term of apprenticeship then required, at the end of four and a half of which he was to be allowed to go to hospital study in London. There is some pertinent criticism of the system of apprenticeship as compared with modern medical education. Its advantages, he says, were greater than is now commonly supposed. Many things of great utility in after-life could be thoroughly learned—things of which the ignorance is now a frequent hindrance to success. The period was, however, too long and the necessary daily work dull and at times tedious and apparently useless. As an apprentice Paget experienced an epidemic of Asiatic cholera. It is hard to remember anything of the methods of practice then generally used, he says, which is still instructive; the principles were deemed sure whatever consequences might ensue from observance of them. His apprenticeship gave opportunities for the study of botany and of this Paget writes "I think it impossible to estimate too highly the influence of its study on the course of my life. It introduced me into the society of studious and observant men and gave me an ambition for success or at worst some opportunities for display in subjects that were socially harmless; it encouraged the habit of observing, of really looking at things and learning the value of exact descriptions."

Besides botany Paget taught himself French and learned to sketch. Of his educational work at this time he says: "Its immediate utility was too little, its indirect utility too great, to be told. The knowledge was useless; the discipline of acquiring it was beyond all price." It was at this time when he was 20 years of age and shortly to enter St. Bartholomew's Hospital that he published with his brother Charles a "Natural History of Yarmouth." Of the years of pupilage at St. Bartholomew's Hospital space does not permit us to tell much, but there is no part of the book better worth reading for an insight into what work means to men of Paget's stamp or for a glimpse of his ardent friendship and of his quick appreciation of character in companions or teachers. Throughout the book we find indications of Paget's keenness of insight and correctness in estimating the persons with whom he came into contact. Probably no quality was of greater value to him in later years of practice. The next chapter of the memoirs, Waiting-time, 1836–43, contains a record of hard work at teaching and writing and a scantiness of remuneration that should console the struggles of any young medical man. His annual income from practice at this time never exceeded £23 13*s.* and for the curatorship of the hospital museum he received £40 a year. He was now engaged to be married to the lady who after seven years became his wife, and, though the prospect of enough to marry on was then distant, his letters show a cheerfulness, a spirit, and a determination that seem justly to give an instinctive trust in the future to such men as James Paget.

Besides teaching, Paget was at this time constantly writing and reading and he taught himself German and Dutch. In 1843 he became lecturer on physiology at St. Bartholomew's Hospital and the first dean of the medical school. For the next eight years he lived in the hospital. During this time he became professor of surgery and anatomy at the Royal College of Surgeons of England and assistant surgeon to St. Bartholomew's Hospital.

In May, 1844, he married and "began to enjoy that happiness of domestic life which has lasted without a break for 39 years." There is no more attractive passage in this book than one describing Paget at work at home. He had the rare talent of being able to read and to write in a room where the rest of his family were otherwise occupied, and seemed to keep up at the same time a lively interest in what they were engaged upon or talking of, putting a word now and then into their conversation whilst busily engaged with papers and books at his own particular bit of the table. As a lecturer and public speaker Paget has had few equals in his own profession, and the memoirs contain interesting pages in which he discusses the value of this power and the best methods of exercising it. He counsels both the learning of speeches by heart and the practising of the power of speaking offhand. The consciousness that this can be done in case of need he found a wonderful help to the memory in that it diminished the fear of utter failure. *A propos* of lectures, he recalls Abernethy's historic utterance on entering his class-room full of students, "Good God, gentlemen, what will become of you all?" Paget, too, was impressed with the immense responsibilities of medical practice. He held it the bounden duty of medical men to make themselves as efficient as possible, and one of his favourite themes was the possibility—further, the necessity—of combining science with practice. In 1851 he resigned the wardenship of the College at St. Bartholomew's, and then private practice really began. It grew now steadily till, when at its height, an income was reached of £10,000 a year. Reflecting on the causes of success and failure Paget writes: "Anyone with a safe knowledge of his profession, free from the faults of habitual idleness, unpunctuality, incivility or unbusinesslike conduct, may be as certain of success in the practice of medicine or surgery, or both, as in any other business in life." Speaking, however, of the risks of professional life he reflects that had he died before 47 years of age he would have left wife and children in extreme poverty. The memoirs were written in the years 1880–85, when Paget was between 60 and 70 years old, and deal mainly with his early life. The latter years of great success, numerous friendships, and constant work in practice and on public and professional bodies are best appreciated by reading the second half of the book which contains the letters. Space will not permit us to deal adequately with the many professional questions discussed in these letters or with the abundance of delightful personal anecdotes and experience that they tell. We recommend their perusal to every one of our readers. Whether on account of his wisdom in all conduct of affairs or for the honourable and dignified view he took of life, whether for his insight and honesty in dealing with patients, or his indefatigable labour and interest in all that concerned his own profession, no medical man should fail to make himself familiar with the character and example of Sir James Paget.

Scientific Memoirs by Medical Officers of the Army of India. Edited by Surgeon-General ROBERT HARVEY, M.D., C.B., LL.D., Director-General, Indian Medical Service. Part XII. Simla: Government Central Branch Press. 1901. Price 5 rupees 12 annas.

THESE scientific memoirs by medical officers of the army of India serve to illustrate a matter on which we dwelt very recently as to the favourable position in which army medical officers are placed for observation and experiment and for cultivating natural science, into the fields of which they could but peep at the beginning of their medical studies. The present part of these memoirs contains six contributions from medical officers of the Indian Medical Service. A brief enumeration of their titles will show how wide and varied is the view open to medical officers for scientific study and observation. There are two papers upon botanical subjects by Major D. Prain, I.M.S., the superintendent, and Lieutenant A. T. Gage, I.M.S., the curator of the Royal Botanic Gardens, Sibpur, near Calcutta, and one on Zoological Gleanings from the Royal Indian Marine Survey Ship *Investigator* by Major A. W. Alcock, I.M.S., superintendent of the Indian Museum and Professor of Zoology in the Medical College of Calcutta, formerly surgeon naturalist to the Indian Marine Survey. In addition to these there are some important contributions dealing with questions of medical or sanitary science, such as one by Captain C. F. Fearnside, I.M.S., on Inoculation of Malaria by Anopheles; Some Observations on Spirillum Fever as seen in the Monkey, by Captain George Lamb, I.M.S., of the Research Laboratory, Bombay; and a contribution by Major Ernest Roberts, I.M.S., on Some Practical Methods of Sanitation in India, with Special Reference to Cantonments. With the last-named paper we have already dealt at some length.[1] A Leguminous genus Afzelia was founded by Smith in 1798 for a tropical African tree, but since Smith wrote no one has been able to find a plant exhibiting *all* the characters that he attributed to it. The paper by Major Prain is a learned and exhaustive one on the Characters and Relationships of Afzelia (Smith). The Zoological Gleanings by Major Alcock were well worthy of being collected and classified and of being published as a supplement to the Summary of Deep-sea Zoological Work which appeared in these memoirs in 1899. They contain much information and many curious and suggestive observations of scientific interest. We notice that Captain Fearnside in the practical conclusions of his paper on Inoculation of Malaria by Anopheles dwells very forcibly upon the great practical—indeed, in his opinion, insuperable—difficulties that exist in the way of ridding India of the anopheles and in the application of prophylactic measures to the native population of that country. His view is "that the malarial parasite is trimorphic and that there is a phase (extra-corporeal) yet to be discovered." The contribution on Spirillum Fever as seen in the Monkey, by Captain Lamb, records the results of a series of carefully-conducted experiments carried out by its author at the Research Laboratory, Bombay, together with his observations thereon. The concluding article, by Major Roberts, which is of a very practical character, on the Methods of Sanitation in India with Special Reference to Cantonments, has, as we have already said, been previously noticed. These memoirs are written in a thoroughly scientific spirit and are admirably illustrated, and their production is highly creditable to the Indian Medical Service.

LIBRARY TABLE.

Physiologie. Von Dr. P. SCHULTZ. Second edition. Illustrated. Berlin: S. Karger. (British importers: Williams and Norgate, London.) 1901. Pp. 364. Price 7*s.*—This is exactly the sort of book to fill the critical soul of the reviewer with an agonising sense of his own ineptitude for the task of reviewing. There is nothing to criticise and nothing to commend. Dr. P. Schultz's "Physiologie" presents a dull level of accurate physiological fact. We have searched, we will admit, for some inaccuracy, some *lapsus calami*, some unguarded expression of opinion, which might relieve the dull monotony of its hopeless mediocrity, but for all our pains we have searched in vain. We must, however, express our gratitude to the

[1] THE LANCET, July 6th, 1901, p. 29.

author for providing us in his preface with the very cue for which we were racking our brains, so that we might express in the fewest possible words our sentiments on the literary merits of this compendium. In the words of Terasson, this work "would have been much shorter if it had not been so short," and in those of Kant, "much plainer if it had not been so plain." It is not, however, from the standpoint of the British reader or of the British student that the value of this compendium should be estimated, but rather from that of the candidate for the German "Staatsexamen," for whose powers of assimilation no man can be accountable and whose traditional thirst for accurate information may well be satiated in the cup which Dr. Schultz has filled to overflowing. Regarded from this point of view—that is to say, as a compendium of exact physiological information for students preparing for a cut-and-dried examination, in which accuracy is at a premium and independent thought and controversial considerations at a discount—this "Studentenbuch" must be regarded as entirely satisfactory. The contents are divided into 24 chapters, each of which constitutes a complete lesson in itself. The illustrations, though not numerous, are excellent of their kind, while the print is small and very trying to the eyes.

Operative and Inoperative Tumours of the Urinary Bladder: a Clinical and Operative Study based on 500 Cases. By E. HURRY FENWICK, F.R.C.S. Eng., Surgeon to the London Hospital, Surgeon and Pathologist to St. Peter's Hospital for Urinary Diseases. London: J. & A. Churchill. 1901. Pp. 124. Price 5s.—The surgery of the bladder owes much to the cystoscope. Before the invention of this instrument it was certainly sometimes possible to form a diagnosis on the nature of a vesical growth, but the diagnosis was frequently difficult and often was erroneous. Our present knowledge of the cystoscope enables us frequently to speak with certainty on the nature of a tumour of the bladder and we are justified in recommending or advising against any operative procedure. Not only does this diagnostic means aid us in deciding what cases are unfit for operation, but by the knowledge gained by cystoscopy we undertake more readily an operation in a suitable case. The use of the cystoscope is widely spread, and it is not always recognised that much familiarity with the instrument is needed before reliance can be placed on what is seen, for it is not merely necessary to see the growth, but it is equally needful to be able to interpret what is seen. As Mr. Fenwick's work is based on 500 cases which he has himself treated it may be worth while to quote the four rules he lays down for the examination of tumours of the bladder. They are as follows: "Rule 1. Always cystoscope, never sound, for symptomless hæmaturia. Rule 2. A gentle rectal examination should be the first step in the inquiry. Rule 3. Dark hæmaturias without clots rarely need any preparatory washing-out for clear cystoscopy; a diuretic often suffices. Rule 4. Always cystoscope and operate, if necessary, at the same sitting if the bladder has to be washed out." The difficulties of cystoscopy are then described. The author divides vesical tumours into (1) the benign villus-covered growth; (2) the malignant villus-covered growth; and (3) the bald malignant growth; and these three forms and their clinical histories are then described. The operative treatment of growths of the bladder is fully given. Mr. Fenwick has operated 135 times with nine deaths. He objects to the use of Petersen's bag, as it is in his opinion not merely useless but liable to produce secondary cystitis by traumatism of the rectal mucous membrane. He prefers to make the opening into the bladder only large enough to admit the forefinger. For accurate work the author thinks highly of the use of a caisson, for by its use only a small opening is necessary, and manipulations are much simpler, and the whole growth can be readily removed. Caissons of different sizes are employed. The light is obtained from a small head lamp. The book contains almost entirely the methods practised by the author himself and refers but little to other modes of treatment; still, as Mr. Fenwick has devoted much attention to this branch of surgery the work is of great value.

Treatment of the Insane Then and Now. By the Rev. HENRY HAWKINS, M.A., late chaplain of Colney Hatch Asylum. London: Society for Promoting Christian Knowledge. 1901.—In this little brochure of 32 pages the late chaplain of Colney Hatch Asylum gives a concise and interesting account of the treatment of lunatics in the eighteenth century when, "after all allowance was made, the management was often superstitious and inhuman," and contrasts it with the more humane and enlightened methods which were introduced in the early decades of the nineteenth century by Pinel, Tuke, and other apostles of humanity and which are uniformly in operation now. Reference is made to the bright and cheerful surroundings in which the lunatic is placed in our modern asylums, to the careful provision for their religious privileges, and to the special royal and naval hospitals for soldiers and sailors suffering from mental derangement. The basis of the compilation is acknowledged as resting on the late Dr. D. Hack Tuke's "History of the Insane in the British Isles," with excerpts from the report of the Commissioners in Lunacy published in 1900. The little work is popularly written and is intended to give the lay mind an outline of the differences between the conditions of lunatics now and a century ago.

Golden Rules of Hygiene. By F. J. WALDO, M.D. Cantab., D.P.H., Barrister-at-Law. Bristol: John Wright and Co. London: Simpkin, Marshall, Hamilton, Kent, and Co., Limited. 1901. Pp. 69. Price 1s.—This is the tenth of the excellent little "Golden Rule" series and the author's name is sufficient to guarantee the practical nature of the notes which it contains. It is written with the idea of collecting together in a succinct form—the little book may easily be carried in the waistcoat pocket—a few salient points that may prove of service in the acquisition of a practical knowledge of hygiene, the subjects treated being air, water, disposal of refuse, food, and infectious diseases. Under the heading of food milk is, of course, included, but we fail to see any reference to butter. Several common epidemic diseases may be caused by contaminated milk, and the author rightly alludes to this fact in his notes of warning; and butter is quite as likely to convey disease as is milk. This fact is too often overlooked.

JOURNALS AND MAGAZINES.

The *Medical Magazine* for September is largely occupied by prospectuses of the different London, provincial, Scottish, and Irish medical schools, and various preparatory institutions. Dr. P. Brouardel's articles on the measures adopted by several nations for the Prevention of Consumption are concluded, and Mr. A. G. R. Foulerton writes on the Influence of Secondary Infections in Chronic Pulmonary Phthisis. Mr. Foulerton considers the nature of chronic pulmonary tuberculosis before secondary infection has converted it into one of chronic pulmonary phthisis. Uncomplicated pulmonary tuberculosis is, he admits, very rarely met with in practice, but frequent evidence of its occurrence is given in the post-mortem examinations of persons who have died from other causes. The secondary infecting bacteria are mainly the pyogenic cocci, particularly streptococcus pyogenes. He notes that the bacteria which under normal conditions are most often arrested in the fore part of the nasal passage, are those which are most frequently found infecting pulmonary cavities. Mr. Foulerton believes that the treatment of secondary infections should be the chief object aimed at in the treatment of phthisis. The magazine contains also an abstract of the Wilde lecture on the "Flora of the Human Body," by M. Elie Metchnikoff.

THE LANCET.

LONDON: SATURDAY, OCTOBER 12, 1901.

The Treatment of Cancer.

IN a leading article in THE LANCET of August 31st last, p. 601, we referred to the address by HIS MAJESTY THE KING to the foreign delegates at the British Congress on Tuberculosis, in which HIS MAJESTY said: "There is still one other terrible disease which has up to now baffled the scientific and medical men of the world, and that is cancer. GOD grant that before long you may be able to find a cure for it or to check its course." Such a wish will be echoed in every quarter of the globe. For the purpose of our present remarks we may take the term "cancer" as synonymous with "carcinoma." At the present time operation is the only means that offers any certain hope of cure and then only under particular circumstances. It is not our intention here, however, to enter into the prospects of a patient suffering from cancer of the breast, for instance, when submitting to operation. Such considerations have been fully discussed by many authors, but the subject of the treatment of cancer is one which has again been recently brought forward in the lay press, and it is important that false ideas on the subject should not be allowed to become prevalent. In order that a rational treatment of cancer may be established it is first essential that its cause and nature must be fully understood; unfortunately this is not yet the case, but many investigators are at work and the clinical material is only too abundant. A somewhat new departure in the method of investigation has recently been instituted, notably at the Middlesex Hospital, where, as is well known, a special wing is devoted to cancer cases—namely, a systematic investigation under the auspices of a committee to whom a report of the work accomplished is regularly submitted. This scheme has manifold advantages over individual work, although the latter should naturally be encouraged as far as possible by means of grants and opportunities for study. In view, moreover, of the many institutions where cases of cancer are admitted we strenuously oppose the proposition which has been made in a lay paper, that a "cancer clinic" should be established; the multiplication of special hospitals for cancer is not desirable. Philanthropic individuals anxious to serve an admirable cause by giving much-needed funds would do a greater service by assisting existing institutions where such investigations are being at present carried out than by seeking to establish fresh ones.

We are forced to admit, then, that the cause and nature of cancer have not yet been definitely made out, but we have every confidence that the labour of present investigators will bear fruit and will pave the way for a rational treatment of the disease. Meanwhile we are strongly of opinion that it is legitimate to give a hearing to all those who have had opportunities of examining cases and of trying various measures of treatment. Acting on this principle we publish a paper by Mr. JOHN HOLDEN WEBB of Melbourne who claims that he has met with some success by the injection of soap solution, his theory being that the cause of cancer is cholesterine which has been separated "from the living cell," so permitting the "cell-cancer to start." We cannot say that we have been particularly impressed by the cases which he describes. Nevertheless, we do not feel justified in refusing to publish such an article as the one under discussion, as every method which holds out any hope of success should be duly tried. The same remarks apply to the article published in THE LANCET of Sept. 28th, p. 845, entitled "The Prospect of Cure in Cancer," by Dr. H. MANDERS, who advocates the employment of electricity in the treatment of cancer and maintains that in currents of high potential and exceeding frequency there is a means, hitherto unknown, of stimulating the vital energy of cells and of enabling them to utilise auxiliary remedies.

The belief that a satisfactory treatment of cancer is possible without recourse to operation, or perhaps we should say in cases where operation is undesirable or impossible either on account of the situation of the disease or its extent, is strengthened by cases which have been recorded in which the malignant disease has spontaneously disappeared. Mr. A. PEARCE GOULD brought a remarkable case of this nature before the Clinical Society of London[1] in which a cancer was removed from the breast of a woman by Dr. W. J. COLLINS in 1885, the nature of the tumour being confirmed by microscopical examination, and further operations being necessary in 1892 and 1894. In 1895 she was admitted into the Middlesex Hospital and was then found to have extensive recurrence of the disease, the glands being largely involved. In the following year, however, practically all signs of the disease had disappeared; no special treatment had been adopted. Cases of this nature are, of course, extremely rare, but they prove that malignant disease may be eradicated.

Another method of treatment which has received much attention is the administration of thyroid colloid; some satisfactory results have been claimed. Removal of the ovaries also has undoubtedly in some cases been productive of good results, Dr. G. E. HERMAN amongst others having recorded some successful cases; and these two methods when combined have been found greatly to relieve malignant conditions, even if a cure has not been effected.

In an address delivered on Oct. 4th before the West London Medico-Chirurgical Society by Mr. ALFRED COOPER (see p. 965) the present treatment of inoperable cancer was fully reviewed and measures were recommended which had been adopted with success. In addition to the performance of oöphorectomy, to which we have already referred, the use of Coley's fluid in cases of inoperable sarcoma was mentioned, and in cases of rodent ulcer and in the superficial malignant ulceration in other parts the Roentgen rays seem to give some hope of improvement. Mr. COOPER is also of opinion that in cases where these methods are declined or are inapplicable the internal administration of celandine is worthy of trial.

The greatest caution is, of course, necessary in considering

[1] Transactions of the Clinical Society of London, vol. xxx., 1897, p. 205.

any mode of treatment that may be advocated. As in the case of all diseases of which the nature is doubtful quack remedies or modes of treatment which have apparently been of benefit in a single case may be counted in dozens, but it is scarcely necessary to point out that for any therapeutic measure to be seriously considered it is absolutely essential that the nature of the growth should be firmly established, if possible by microscopical examination or by the examination of competent observers, and also that a series of cases should be treated, before even a temporary opinion can be arrived at. We say this in explanation of what we maintain above—that all measures which have been found to give relief in cases of cancer should be duly considered and carefully tried. Once more we must protest against attempts to stir up public feeling in the lay papers with regard to what are termed "experiments upon hospital patients." Such statements are made by persons entirely ignorant not only of the methods adopted by physicians and surgeons attached to hospitals but also of everything connected with medical science. It is useless, however, we fear, to argue with such people or with the editors who allow such communications to appear in their columns, communications which are calculated to injure charitable institutions and to hinder the advance of scientific knowledge.

The Reorganisation of the Army and Indian Nursing Service.

WE endeavoured to deal last week with the report of Mr. BRODRICK'S Committee on the Reorganisation of the Army Medical Services in a broad, comprehensive spirit. While we stated that some of its recommendations might have either to be developed still further or to be modified and that the effect and working of them must for the time partake of the nature of experiment we nevertheless recognised that the report, as a whole, was framed on bold and generous lines. We assumed that in any case a good deal of freedom of action would within those lines be open for such improvements or modifications of the new scheme as were hereafter found advisable or necessary. One of the grave problems of modern warfare, which the course of events in South Africa has brought out so prominently, is the proper care and nursing of the sick and wounded. It is not surprising, therefore, to find it recommended that the Nursing Service should be specially represented on the Army Medical Advisory Board about to be established and that the matron-in-chief of "Queen Alexandra's Nursing Service" is to be included among its members for that purpose. This naturally brings us to the consideration of the report on the reorganisation of the Army and Indian Nursing Service which was also drawn up by the same Committee that reported on the reorganisation of the Army Medical Services and was issued as a separate document at the same time.

The report on the reorganisation of the Army and Indian Nursing Service consists of eight pages and after a perusal of these we are glad to congratulate the members of the new Nursing Service on their good fortune in not being called upon to encounter a series of examinations such as beset the path of officers of the Royal Army Medical Corps.

The Committee recommend that there shall be one military nursing service for His Majesty's army in the United Kingdom, India, and the Colonies, to be designated "Queen Alexandra's Imperial Military Nursing Service." This amalgamated service is to be under the control of a board of which Her Majesty Queen ALEXANDRA is to be requested to assume the presidency. The chairman is to be the Director-General of the Army Medical Service, or an officer nominated by him, and two members of the Army Advisory Board, of whom one shall be a civilian, are to be members of the Nursing Board. The same principle which was so apparent in the report on the reconstitution of the Army Medical Services—namely, that of bringing them into the closest relations with the profession in civil life—is likewise apparent here, for three matrons of large civil hospitals with medical schools are to have a place on the Nursing Board. The other members are to be the matron-in-chief, a representative of the India Office, and two members (to hold office for three years) nominated by Her Majesty the President. The minutes of the proceedings of the Nursing Board are to be laid by the matron-in-chief before the Army Advisory Board and the Secretary of State will, if necessary, decide in cases of divergence of opinion between the two boards. All this sounds a somewhat complicated procedure but it is, we suppose, officially speaking, necessary.

Subject to the general control, then, of the Army Advisory Board the newly-constituted Nursing Board will have a good deal of power and responsibility in advising the Secretary of State upon all matters appertaining to the Army and Indian Nursing Service and its organisation, development, and administration.

There is no need to enter at any length upon those portions of the report defining the functions and duties of the different grades, the conditions of service, and other details regarding pay and allowances, seeing that these are sure to be carefully studied by all directly interested in the subject and that they are very much such as, speaking generally, might have been anticipated. The scheme as it stands on paper seems to have been carefully thought out and to be a promising one, but it is impossible to say until it is practically tried whether it will prove efficient and will realise all that may be hoped from it. Apart from special training, patience, sympathy, gentleness, and devotion are most essential qualities required for successful nursing, and in these respects women excel men. Nursing is a woman's special sphere. If it takes time to make a soldier it takes much longer to make a really good nurse, the value of whose services when obtained is, however, incalculable. We cannot speak too highly of the watchful care, skill, and unselfish devotion displayed by such a stamp of lady nurses in the hospitals of South Africa. We can only hope and believe that the members of the new Nursing Service will have nothing to complain of in regard to the position accorded to their service which under the new *régime* will have a large sphere of influence and independence and, we feel confident, of usefulness also.

The Reformation of Habitual Drunkards.

THE reclamation of the inebriate, if a difficult, is not quite a hopeless, matter. Experience has proved that in cases where a rudiment of will remains a power of refusal in the presence of temptation can frequently be developed from it. This, in brief, constitutes the psychological justification of what are known as inebriate reformatories. In so far as these institutions can be made to promote successfully this process of will-cultivation in so far will they have secured for themselves a *locus standi* in respect of the work they do. There are, it is true, various economic points to be considered in defining their proper position. At the outset it should be noted that, as stated in our issue of Sept. 28th, p. 862, we do not regard the drunkard as one who is merely the subject of mental disease. Occasionally he may, indeed, become such, but the habit of drunkenness in itself is not insanity. It is the custom with many advocates of temperance to speak as if the captives of self-indulgence were well-nigh hopeless of deliverance and practically rid of personal responsibility. If they were so reform were equally hopeless. It is because we do not agree with this view of the case that we are disposed to look with approval on any rational project for their moral reconstruction.

Since the passing of the Inebriates Act of 1898 a considerable amount of attention has been attracted to the system which provides for this class of people the educational restraint of a reformatory. From the report of the establishment for female inebriates at Farmfield, Surrey, it is possible to form some idea of the plan on which a work of this kind may be carried out and of its future possibilities. The estate of Farmfield was purchased by the London County Council and adapted to its present use at a cost of £19,965. It comprises 374 acres of farm land of moderate quality and provides accommodation for 30 female inmates. A further sum of £20,000, it is stated, has been allotted with a view to the housing on the estate of 80 more women. A plain but not a sparing diet, of course without any intoxicant, and an eight-hours' working-day form the daily rule of life. The usual occupations consist of laundry, dairy, and farm work. The cost of maintenance is not light. Up to the present time it has amounted to £1 9*s.* 4*d.* per head per week. The Farmfield colony has been less than a year in existence, and none of the inmates have as yet been allowed to leave on licence. Consequently, it is impossible to gauge the measure of success achieved in it. The opinion appears to prevail, however, that detention for at least a year, and preferably for a longer period, is necessary before anything approaching a reformation of character can be looked for. It is, indeed, impossible to speak with any confidence on this subject. The whole reformatory scheme is in its experimental stage. For this reason it seems advisable that the system should not be too readily or as yet too widely adopted. It must be borne in mind that some time must elapse before it is possible to tell how far the after-life of inmates has been able to follow the course to which it was introduced in the reformatory.

There is, moreover, as we have said, an economic as well as a moral side to this subject. County and borough councils are certainly not justified in going to any length in order to carry out even a work of reclamation. Some regard must be had to the social position of inmates in reformatories. When the income of the inebriate or of his relatives can procure his admission into one of the numerous "retreats" where payment is required it is not to be tolerated that the ratepayers should be taxed for his maintenance. Nor in the case of the pauper inmate should provision be made for idleness. It is no less essential to the well-being of the drunkard than fair to his temperate neighbours that while under care he should work for his living and earn it. Unless this rule be carried into practice we cannot see what justification there is for a reformatory, since it must not only prove a drag on the public purse, but must surrender a material part of its reforming method. A suggestion has been made that the less tractable inmates of the ordinary certified inebriate reformatories such as that at Farmfield should be taken in hand by the State which is expected to provide a special form of reformatory for their reception. It is true that powers are granted under the Act for the establishment of State reformatories for criminal drunkards, but we are tempted to inquire whether the place which they are intended to fill could not be found within the walls of prisons already existing. There it should not be difficult to exclude alcohol while promoting habits of industry. It seems somewhat superfluous that another place of restraint should be provided for the intractable inmates of certified inebriate reformatories.

Annotations.

"Ne quid nimis."

MEDICAL OFFICERS OF HEALTH AND DIAGNOSIS.

A CORRESPONDENCE involving a point of considerable interest to medical officers of health and to medical practitioners generally has recently taken place between Dr. David Roxburgh of Bryanston-street, W., and Mr. A. Wynter Blyth, medical officer of health of St. Marylebone, and has been made public by the former gentleman.[1] Stated briefly the question arose from a case of small-pox with regard to which Dr. Roxburgh, who was attending the patient, felt doubtful and which he accordingly did not notify as such, but with regard to which he informed the medical officer of health of the district in which it occurred. There appears to be some question between Dr. Roxburgh and the Public Health Committee of St. Marylebone as to the time which elapsed before the case was finally diagnosed and removed, but with respect to what actually took place Mr. Blyth writes as follows: "Immediately on receipt of your letter I telephoned to Dr. Greenwood, and he saw the case between 11 and 12 midday, and a second time in the evening," and from this passage it is apparent that he does not limit his duties in practice as he would seem to limit them in theory from the next paragraph in his letter. He there writes, "I am always pleased to assist my medical *confrères*, but you must understand that the diagnosis of cases is no part of the duty of a medical officer of health; the responsibility of diagnosis rests with the medical attendant entirely; after

[1] The Times, Oct. 8th, 1901.

the diagnosis is made and the case notified the duties of the sanitary officers commence." Taken literally, and acted upon, this statement of the position would in many cases lead to disastrous consequences, and would probably bring the medical officer of health into serious collision with the local authority employing him. The medical attendant of a sick person must not shirk his responsibilities; he must notify in the case of certain specified diseases, if in his opinion his patient is suffering from one of them. Should he fail to do so he is liable to prosecution, and for this very reason, if he writes to the medical officer of health during an epidemic of small-pox and gives information to that official of a case with regard to which he declines to advance a definite opinion, he may almost be assumed to do so with the knowledge of his position and of the danger of shirking responsibility should such responsibility really rest upon him. It is, however, perfectly well known that errors of diagnosis may be made, and, in fact, have been made, in cases of small-pox, and that a wrong decision, resulting in a case of small-pox escaping notification and the measures consequent upon notification, may be a very serious matter for the community at large. Mr. Wynter Blyth's view, as expressed in his own letter without qualification, is that the diagnosis of cases is no part of the duty of a medical officer of health. As we have suggested, he may depart from it in practice, but, taken merely as an academic statement of principle, it will hardly bear investigation. He is not, of course, to be regarded as a consultant who may be called in when any practitioner is in doubt; but he, for example, would not, either in theory or practice, be justified in sending to a small-pox hospital and otherwise dealing with a case notified as small-pox if he felt sure that the medical man who had certified it had done so in error, while the course he would thus take would be the result of his own diagnosis. Again, it is the duty of a medical officer of health, beyond all question, where he has an admitted case of small-pox to trace its origin and to ascertain, if possible, whether other persons may have been infected by it. If in the course of such an investigation he finds that the patient has been in frequent contact with a person who in the opinion of a medical practitioner is at the moment suffering from chicken-pox, can the medical officer of health in such a case say that diagnosis forms no part of his duties or that they only begin after the diagnosis is made by someone else and the disease notified? It is not easy to define where the duties of a medical officer of health either begin or end at any time, and during the occurrence of small-pox in his district their limits may be said to extend themselves. They include the searching out—and, if possible, the stamping out—of the disease in his district, and they involve coöperation with everyone who will assist in the task in his district or elsewhere. If a medical practitioner informs a medical officer of health that a case under his treatment may be small-pox and declines to certify it as such he may be evading a duty which the law imposes on him, and whether he be doing so or not is a question of fact, though not perhaps an easy one, which a magistrate may be called upon to decide. He may, on the other hand, be giving the earliest possible information as to a case in which early information is of the utmost importance and of which early information should beyond all question be given, even if it does not take the form of a certificate. That Dr. Roxburgh could not be blamed for not giving a certificate when he made his first communication seems clear from the fact that after this Dr. Greenwood saw the patient twice with an interval of several hours between his visits before she was removed. We have commented on Mr. Wynter Blyth's letter, not because we have any fault to find with his conduct, but because the second passage which we quote from his letter seems to suggest the view that Dr. Roxburgh would have done better to have waited until he was prepared to enunciate a definite opinion embodied in a certificate, and that the St. Marylebone Borough Council, acting through their medical officer of health, would have been morally or legally justified in not acting until such a certificate was given. Neither of these views could be upheld for one moment, and the occasion is one for coöperation rather than for discussion.

THE RECONSTITUTION OF THE ROYAL ARMY MEDICAL CORPS.

IT may be well to make it known to would-be candidates for admission to the Royal Army Medical Corps that the reconstitution scheme drawn up by Mr. Brodrick's Committee, the full text of which was published in our issue of Oct. 5th, p. 929, *is only a scheme*. Before it can be acted upon or taken advantage of it will have to appear as a Royal Warrant. Before this happens the outline scheme as published may be modified or amended in various ways. It is therefore quite useless for anyone to write or to call at the office of the Army Medical Department for information concerning the date of the next examination or any other points in the scheme, for nothing more is known than has been already published, and any letters asking for further information are merely a waste of time on the part both of those who write and of those who receive them.

DIFFERENTIAL DIAGNOSIS BETWEEN SMALL-POX AND CHICKEN-POX.

IN another column we publish a letter from a correspondent drawing attention to the fact that the vesicles in chicken-pox are unilocular, whilst in small-pox they are multilocular, so affording a valuable differential test between the two diseases. As has been shown in the present outbreak of small-pox the diagnosis between that disease and chicken-pox is of considerable difficulty and, needless to say, an error may give rise to grave results, not only to the individual affected, but to the community at large. There are other differences between the two of which we may remind our readers, more particularly as the younger generations of practitioners have not had many opportunities of observing cases of small-pox. The initial symptoms are not so marked in chicken-pox—indeed, they may be entirely absent, whilst in small-pox the constitutional symptoms appear early and there is high fever. It is, however, to the eruption that most attention is naturally directed. In chicken-pox it is most abundant on the trunk and is less on the face and extremities. It is discrete and may appear in one crop or in successive crops, during a period of from one to five or more days. In small-pox the eruption is most abundant on the face, arms, and legs; moreover, there is a characteristic fall of temperature after the appearance of the rash. In chicken-pox the eruption is at first macular or papular, but becomes vesicular within a few hours. The vesicles vary in shape according to the part of the body on which they are situated, being oval on the chest, abdomen, and back, circular on the scalp, and irregularly round on the face, whilst on the arms and thighs they are mostly circular. The vesicles likewise vary in size on the various regions. They are clear, bright, and shiny and filled with a clear fluid. In small-pox the eruption is no fully vesicular within from six to 12 hours of its appearance, and the vesicles when formed are not oval. Previous vaccination frequently changes the characteristics of the small-pox eruption. Dr. J. MacCombie, writing in Professor Clifford Allbutt's "System of Medicine," also points out that on the extremities the similarity of the vesicles of chicken-pox to those of modified small-pox usually increases in direct ratio to the distance from the trunk. In many cases of chicken-pox the vesicles on the forearms, legs, backs of the hands, and back and dorsum of the foot

are round and hard, small in size, not unlike the eruption of modified small-pox, and if only the eruption on the forearms, hands, legs, and feet be observed it would be impossible in more than half the number of cases to say whether the disease was chicken-pox or small-pox. But all cases of small-pox present typical vesicles on either the abdomen, chest, back, thighs, or arms. Especial regard must therefore be had to the distribution of the rash, and especially to the fact that in chicken-pox some of the vesicles at least have reached their full development within one day from the appearance of the papule, while in small-pox the vesicles are not fully developed until five days after the appearance of the eruption.

TEMPERED CAPTIVITY.

MR. EDMUND SELOUS was moved to considerable indignation in the *Saturday Review* some months since by the condition of various animals in the Zoological Gardens; his emotions still seek a new outlet in a partial reprint of those articles which has been issued with the assistance of the "Humanitarian League." The writer of this pamphlet reads into the animal mind purely human feelings, an error which is exceedingly widespread. The study of animal psychology, as has been pointed out again and again, is apt to be most seriously impeded by this commonly accepted anthropomorphism. It is quite inaccurate to compare the sufferings of a man with those of a quadruped; our miseries, even purely physical pains and pangs, are so interwoven with experience, reflection, and brain processes generally that they are entirely changed in character. In altogether waiving discussion upon this very important point—indeed, in practically asserting an entire community of feelings and emotions between the lower animals and ourselves—Mr. Selous commits himself to extremely uncertain ground upon which to base an indictment of the actions and inaction of the Zoological Society. Besides, judged by such tests as we can apply, for example, by healthy appearance, alertness of demeanour, and by appetite and longevity, Mr. Selous's sympathies require revision. A parrot that lived for 54 years, a polar bear, a crane, a pelican, and a condor that survived among these alleged miseries for periods varying from 30 to 40 years, and plenty of other instances to which Mr. Selous can gain access, are not in absolute harmony with his views. Mr. Selous deprecates "an inaccuracy, however slight," as likely to damage his case. Properly impressed by this desire to avoid misstatements Mr. Selous would have done better to consult someone with adequate zoological knowledge, and others acquainted with the difficulties of, and problems connected with, keeping live animals before printing for a second time "The Old Zoo and the New." He should also have ascertained the precise circumstances of some of the creatures to which he refers. The swan allowed with "cruel absurdity" a minute basin to wash in was temporarily deposited in such a place. The great bustard was destroyed. The "jackals, large wolves, and wild dogs" are not limited to "brick yards about the size of a kitchen area"; they have in addition a considerable and dark den behind. When Mr. Selous observes of the wild cat that it utters a sound "between a moan and a snarl—a striking sound eloquent of fierce suffering"—he is a pure inventor of feline language. The eagle is thought by Mr. Selous and by the inexpert public generally to be mainly occupied in soaring and generally admiring the landscape. The eagle does not soar so much except to look for prey. If Mr. Selous knew much of the habits of monkeys he would not suggest a profusion of tropical trees for them to climb among. There would not be a leaf left by these mischievous creatures in a few hours. The "aerial shrubbery" desired for the chimpanzees and orangs would not long be in existence. Mr. Selous thinks that the "poor apes," which he elsewhere "amusively" terms "bosky Pucks," should be given opportunities for retirement. Tamed animals do not shun man. Eagles, vultures, kites, and owls, which Mr. Selous would exclude from his ideal "Zoo," live long in captivity and breed. Seals and penguins in Mr. Selous's ideal "Zoo" are to "get on very well together." Yes! The agreement would be thorough but gastronomic. The penguins would end the day within the seals. Otherwise there is no fault to be found with Mr. Selous's "Garden of Delight." We should be as glad as he to see it. But the Zoological Society must first of all add to its income a good many more thousands of pounds. Then the writer of the pamphlet before us would probably moderate his curious objection to the large number of species exhibited by the society and would cheerfully cry "Let them all come" (recollecting, though, we will hope, that he is not quoting Mr. Pickwick accurately, as he thinks he is) with the rest of us. The best method of attaining this desirable end—for Mr. Selous has no primary objection to captive animals—would be to encourage the public to visit the gardens instead of dissuading them by appealing to the most ignorant kind of sentimentalism, and to temper his criticisms with a greater amount of knowledge acquired on the spot—by admitting, for example, that while during the last few years large structural changes for the better have been effected in the erection of new houses there is every prospect of continued advance as far as the society's income will allow.

THE SOUTHWARK BOROUGH COUNCIL AND ITS PUBLIC ANALYSTS.

AT a meeting of the Southwark Borough Council held on Oct. 2nd at the Southwark Town-hall the Public Health and Sanitary Committee reported that they had had under their consideration the question regarding the public analysts at present holding office in the borough. It appeared that Dr. John Muter was appointed by the late Newington Vestry and the St. George's Vestry in 1872 and Dr. Richard Bodmer by the late St. Saviour's Board of Works in 1890. Dr. Muter was paid at the rate of 10*s.* 6*d.* per sample and Dr. Bodmer at a salary of £105 per annum for a maximum of 200 samples. The fees received by Dr. Muter alone during the quarter ending June last were £250 9*s.* 6*d.*, and the amount was more likely to increase than to decrease. The committee had every reason to believe that the council could obtain the services of a fully-qualified public analyst to devote the whole of his time to the work of the council at a maximum salary of £500 per annum. The cost of fitting up and maintaining a laboratory and providing the necessary apparatus and materials, together with the services of a capable assistant, was estimated not to exceed £300 per annum, and having also in view the time which would be saved by the inspector in carrying samples to the analyst the committee were unanimously of opinion that a considerable saving would be effected by the appointment of one public analyst. Assuming that the Treasury should be of opinion that Dr. Muter was entitled to any compensation for loss of office the amount of pension based on the Treasury scale, without taking into consideration any deduction on account of apparatus and chemicals necessary to enable him to earn his fees, would amount to between £140 and £160. With regard to Dr. Bodmer, the amount of compensation would not exceed £25. They therefore recommended that the council should abolish the two offices and should appoint one public analyst to devote the whole of his time to the service of the council at a commencing salary of £400, rising by annual increments of £25 to a maximum of £500, the council to provide a laboratory, apparatus, and all necessary assistance. This was agreed to by the council. The council are well advised in adopting the recommendation of the committee. The appointment of public analyst should be

subject to the same conditions as that of medical officer of health, though always held by a different individual. The maximum salary might be £600 and not £500.

ST. THOMAS'S HOSPITAL: THE CHESELDEN LODGE OF FREEMASONS.

A WARRANT has been granted by the M.W. Grand Master for the formation of a Lodge to be called "the Cheselden Lodge," No. 2870, and the ceremony of consecration will be performed on Monday, Nov. 4th, at the Governors' Hall in St. Thomas's Hospital in the presence of the M.W. Grand Master H.R.H. the Duke of Connaught and Strathearn, K.G. (President of St. Thomas's Hospital), who will himself undertake a most important portion of the ceremony. The officers named in the warrant are W. Bro. Thomas Wakley, jun., L.R.C.P. Lond., as Worshipful Master, Bro. H. H. Clutton, F.R.C.S. Eng., as Senior Warden, and W. Bro. G. J. Crawford Thomson, M.D. Durh., as Junior Warden. It will be noticed that the name chosen for the lodge is that of the great anatomist and surgeon of St. Thomas's Hospital who introduced the operation for lateral lithotomy. Freemasons connected with the hospital who desire further particulars concerning the lodge can obtain information by applying to Bro. C. R. Box, M.D., 2, Devonshire-place, Portland-place, W.

MALARIA IN HONG-KONG.

WE have received a copy of a clinical report on malaria as seen in the Government Civil Hospital at Hong-Kong, compiled by Mr. J. Bell, acting principal civil medical officer, and Lieutenant G. Stewart, I.M.S., acting assistant superintendent. The report was laid before the Legislative Council by command of His Excellency the Governor. The blood of all patients with fever was examined and not only of those patients obviously suffering from malaria. Some interesting observations were the result of this investigation. Hong-Kong and most tropical countries are looked upon as being very prejudicial to the cure of tubercle. Amongst the Chinese in Hong-Kong the high mortality is put down to overcrowding and insanitary surroundings, but this cannot apply to Europeans and Indians, who form the bulk of the patients in the hospital and who suffer quite as much as the natives. Of 17 cases in which the blood was examined 15 were found to be complicated with malaria, and Mr. Bell and Lieutenant Stewart believe, and probably rightly so, that the malarial combination accounts in a great measure for the rapidity with which the disease advances. It is generally considered that malaria does not produce suppuration in the liver, but in two cases of hepatic abscess the characteristic blood-changes of malaria were demonstrated. Two cases of appendicitis were examined and both showed malaria. The combination of malaria with dysentery is, of course, very common. Out of 37 cases examined 35 showed malarial parasites. In the treatment of these cases quinine was found most useful in addition to salines and ipecacuanha; indeed, the writers of the report remark: "We would almost say that, if a case of acute dysentery does not improve in 48 hours under the latter treatment [salines and ipecacuanha] it is combined with malaria and requires quinine either by mouth or by enema." The combination of malaria with typhoid fever is most interesting to tropical practitioners. The diagnosis frequently presents many difficulties. Mr. Bell and Lieutenant Stewart examined 10 cases which had been seen by other practitioners several times, all of whom confirmed the diagnosis of typhoid fever. All the cases showed in the blood evidences of malaria. The effect of the complication on the chart was various. In some cases for several days the temperature intermitted regularly and markedly until, apparently, the malarial influence ceased to exert itself and the typhoid element became predominant; in others, however, notwithstanding quinine, there was no intermission, and the chart throughout was more characteristic of typhoid fever. The writers state that they did not find much assistance from Widal's reaction. The conclusion they arrive at is that in a case where the diagnosis is doubtful, if after thorough treatment by quinine for 10 days the temperature does not fall, in the absence of any symptom to account for the continued rise the case is in all probability one of typhoid fever. Mr. Bell and Lieutenant Stewart further remark that typhoid fever is considered to be a more fatal disease in the tropics than in temperate climates, and they suggest as an explanation that the malarial element which is so frequently present may account for the high rate of mortality. There are other matters in the report that we might draw attention to; we have perused it with much interest and we trust that a similar report for another half-year will be forthcoming.

A CASE OF FUNGUS POISONING.

THE *Newcastle Daily Journal* of Sept. 27th describes a case in which three young children, named Mason, Dodds, and Borthwick, picked some poisonous fungi in a field and were very soon taken ill. The report proceeds: "The children had to be carried to their homes and Dr. Story was promptly summoned from Catchgate. He applied the stomach-pump and various emetics. Dodds was the worst sufferer, and the doctor had to inject quicksilver which caused her to vomit a quantity of dark clotted blood. The children were yesterday reported to be out of danger." Being curious as to the reported injection of quicksilver we wrote to Dr. Story who kindly supplied us with the following real details of the case. "The children had eaten toadstools while out picking mushrooms. They came home at 4 P.M. and the child Dodds (the only bad case) went to the shop of a relative situated some yards from home, Dodds's mother being in the shop. Told to go home, the child stood before her mother twitching and grinning. The mother took her to the back of the house where she could see her own door and called her husband. He took the smaller child and beckoned to the other to follow. This she failed to do and stood grinning. A niece picked her up, saying, 'There is something the matter with this child; she only grins and can't speak.' The smaller child then said that they had been eating mushrooms. When I arrived the child had been given castor-oil as well as mustard-and-water. The parents had also tickled the back of the throat and tried in every way to get the child to vomit but without success. I injected one-twentieth of a grain of hydrochlorate of apomorphine and in three minutes the child vomited a saucerful of toadstools. Put to bed she slept soundly for several hours." The reporter's interesting "quicksilver and clotted blood" must give way, therefore, to Dr. Story's timely apomorphine and consequent "saucerful of toadstools." Dr. Story's account of the symptoms, if they were correctly reported to him, shows a somewhat unusual effect of what was presumably one of the common poisonous fungi, probably agaricus. It is to be noticed that he does not himself mention seeing any twitching or grinning on the part of the child Dodds. Taken, however, in conjunction with the reported inability to speak, these symptoms may very probably have been present, the child showing early that nervous upset which sometimes precedes and sometimes follows the alimentary disturbances caused by poisonous fungi. In this case, as in most, the symptoms began early. It is only occasionally that they are postponed for 24 or more hours. When nervous symptoms predominate they do not often take the form which they apparently assumed in this instance. More commonly if there are convulsions of any kind they are more general than the "twitching and grinning."

which are probably to be interpreted as a limited convulsive seizure. In a child such symptoms following poisonous ingestion rather suggest analogy with tetany in association with gastric disorder. The nervous symptoms caused by poisonous fungi are not always of a paroxysmal kind. In the case of Amanita muscaria a pleasing intoxication is produced, followed by stupor. This is the fungus which has yielded an alkaloid, muscarin, and the active principle of which is excreted in the urine. Among the natives of Kamschatka it is a practice for one to drink another's urine after having eaten of these fungi for the sake of its pleasantly intoxicating properties. Oliver Goldsmith, in his "Letters of a Citizen of the World," speaks of a tribe amongst whom a similar practice prevailed, but in their case a man having eaten of the fungus proceeded to drink his own urine.

THE NEW ENTRIES AT THE MEDICAL SCHOOLS.

FROM information which we have received through the courtesy of the deans of some of the metropolitan medical schools it would appear that there may possibly be a falling off in the number of new entries for the full course of medical study. In one case there is a slight increase in students entered for special courses and in another the number of students "entered for partial study, especially in anatomy and physiology, is unprecedentedly large." It is, of course, too soon after the commencement of the winter session to give any precise figures, but this we hope to do as soon as the entries are completed.

THE INCIDENCE OF EXPENSE IN ILLNESS.

AN action arising out of a case of typhoid fever was recently heard in the Birmingham County Court in which the plaintiff, a pawnbroker, sued the defendant, a schoolmistress. The defendant had visited the plaintiff some years ago, bringing with her a servant who was distantly related to both parties. In the plaintiff's house the defendant's servant developed typhoid fever and was kept there until she was well. The defendant paid the medical man who attended the case, but denied any liability to pay for anything beyond this, and the plaintiff, who had taken in the servant's mother who came to nurse her, bought stimulants ordered for the patient and incurred the outlay incidental to disinfection, now sued for repayment. There was evidence corroborating that of the plaintiff, to the effect that the defendant had undertaken to be responsible for the expenses incurred beyond the medical attendance and the case was finally settled by the defendant making a payment the amount of which was not stated in court. It is not easy to define in a few words the precise legal position of the parties in such a case, but the master of a servant would hardly in such circumstances refuse to compensate his host if asked to do so, and as a matter of justice few will deny that he ought to be made to do so should he refuse. Beyond this, a guest, we should say, is not bound to pay for disinfecting his host's house after the servant of the guest has been laid up in it with an infectious illness, nor is he bound to pay for the board and lodging supplied to his servant as long as his invitation holds good. In the case, however, of a long illness it is almost inevitable that some discussion should take place between host and guest and that some undertaking should be given as to what is to happen eventually if they are in such a financial position that the expenditure involved is a matter of any importance to them, and we have little doubt that such a discussion did, in fact, take place in the case referred to. In the almost inconceivable case of a guest then and there disclaiming all future liability for his servant the host could, we imagine, terminate the visit, with the result that the guest would be liable to pay for the keep of his helpless servant to the same extent that he would be were the servant lying in his master's house. He could possibly give his servant a month's notice, although humanity would forbid such a step, but would not be entitled to discharge him. Humanity, as a rule, without appeal to the letter of the law settles the course that masters and mistresses adopt when their servants are afflicted with serious illness.

SMALL-POX IN LONDON.

IN THE LANCET of Sept. 21st, p. 826, we mentioned that the Rev. Richard Wilson, curate of St. Augustine's, Stepney, was actively encouraging vaccination among hop-pickers in Kent and had proved his sincerity by being himself revaccinated at a village frequented by hop-pickers. Another London clergyman has taken the same method of showing confidence in the protection thus afforded. The Rev. W. D. Sweeting, vicar of Holy Trinity, Rotherhithe, and the other managers of the National Schools in Rotherhithe, had the schools visited by the public vaccinator on Oct. 1st, when the vicar was first revaccinated in presence of the boys, and then 29 boys were vaccinated or revaccinated. The Council of Almoners of Christ's Hospita have decided, in view of the present outbreak of small-pox in London, that all boys in that school who have not been vaccinated or revaccinated within the last seven years shall be forthwith revaccinated with calf lymph by the medical officer. The question of the condition as to vaccination of children attending board schools continues to receive much attention. At a meeting of the Hackney Board of Guardians held on Oct. 2nd, for the purpose of considering a circular letter from the Local Government Board with reference to the spread of small-pox, the clerk said that it was no part of the duty of the vaccination officers to visit board schools and after some discussion the matter was adjourned *sine die*. At a meeting of the Southwark Borough Council held on Oct. 2nd Mr. G. Millson, the medical officer advised that the London School Board should be asked to grant permission for the vaccination officers to visit the schools in the borough and to examine the children, and it was agreed that the matter should be discussed in committee. As already mentioned in THE LANCET of Sept. 28th, p. 859, the School Board for London have announced that facilities will be given to the public vaccination officers, on the application of the proper local authority, to examine the children in the schools with a view to advising the parents to allow their children to be vaccinated, provided that the parents in each case raise no objection to such examination being made. At a meeting of the School Board held on Oct. 3rd a letter from the Local Government Board was read expressing the opinion that it would have been more satisfactory if the school board had not empowered parents to refuse to have their children examined. The Mile-end guardians have declined to take action in regard to a letter from the Local Government Board pointing out the steps requisite to be taken during the prevalence of small-pox. The epidemic extension of small-pox coincidently with the usual seasonal prevalence of scarlet fever and diphtheria threatens to require all the accommodation available in the metropolitan infectious hospitals. With the view of reducing pressure the authorities of the Metropolitan Hospital have offered to the Asylums Board the use of two wards, containing 24 and 12 beds respectively, for enteric fever cases for a period of four months certain, an offer which has been accepted. The Asylums Board have decided to inclose a cemetery at Joyce Green for the interment of patients who have died from small-pox. On Tuesday, Oct. 8th, there were 171 patients in the metropolitan small-pox hospital ships and the shelters on shore; 51 new cases were

admitted to these hospitals, and three deaths were registered in London during the week ended on Oct. 5th. As is well known, mild cases of modified small-pox are sometimes supposed to be varicella (chicken-pox). With the view of meeting this difficulty the Corporation of London, as the sanitary authority of the Port of London, have given notice that the provisions of the Public Health (London) Act, 1891, with respect to infectious diseases shall apply in the port to chicken-pox from Oct. 25th until the close of the year. The St. Pancras Borough Council have also made chicken-pox a notifiable disease for six months, beginning from Oct. 12th.

MEDICAL OFFICERS IN THE HIGHLANDS AND ISLANDS.

THE *Glasgow Herald* of Oct. 4th contains the following advertisement:—

Medical Officer and Public Vaccinator wanted for the PARISH of STRATH, to take up duty not later than 19th December, 1901. The salary as Medical Officer and Public Vaccinator to be at the rate of £110 per annum. Other appointments may be made. There is a private practice in a population of about 2200. Gaelic a recommendation.—Further particulars can be had from Clerk to the Parish Council, Broadford, Skye, and applications to be lodged with the Chairman, Kilbride House, Broadford, Skye, not later than 23rd October, 1901.

The parish of Strath is extensive in point of area and has a population of about 2200. We learn that the "private practice" is of little value, while "the other appointments" are of little more than nominal value. We can only warn intending applicants to make very sure of three things—fixity of tenure, a free annual holiday, and an adequate salary. We do not consider £110 adequate.

THE LONDON HOSPITAL LODGE OF FREEMASONS.

THE London Hospital Lodge of Freemasons, No. 2845, was consecrated on Wednesday, Oct. 2nd, at the Hotel Cecil, Strand, London, by the Grand Secretary, V.W. Bro. Edward Letchworth, F.S.A., P.G.D. The occasion was in every way a notable one, a very large number of Freemasons connected medically or otherwise with hospitals being present. In the ceremony of consecration the Grand Secretary was assisted by the following Grand Officers: W. Bro. Clement Godson, M.D., P.G.D. (as S.W.), W. Bro. Alfred Cooper, F.R.C.S., P.G.D. (as J.W.), Rev. Sir Borrodaile Savory, Bart. (Grand Chaplain), V.W. Bro. Frank Richardson, P.G.D. (as Director of Ceremonies), and W. Bro. H. W. Kiallmark, M.R.C.S., P.G.D. (as I.G.). The following is a list of the officers appointed: W. Bro. A. Ernest Sansom, M.D., F.R.C.P., Worshipful Master; Bro. Frederick Eve, F.R.C.S., Senior Warden; Bro. F. J. Smith, M.D., F.R.C.P., Junior Warden; Bro. T. Gilbart Smith, M.D., S.D.; Bro. R. J. Probyn-Williams, M.D., J.D.; Bro. Percy Furnivall, F.R.C.S., I.G.; Bro. T. H. Openshaw, F.R.C.S., Secretary; Bro. S. L. Martin, Treasurer; Bro. G. Schorstein, M.D., Steward; and Bro. G. F. Rogers, M.D., Director of Ceremonies. The founders of the lodge subsequently entertained the consecrating officers and their numerous other guests at a banquet. The Worshipful Master, in replying to the toast of his health, observed that the key-word of this lodge was Heartiness. The work of the senior well-wishers of the hospital in the forming of the lodge was rendered with the heartiest zeal, and the willing response of the juniors showed that a pressing want was supplied. The coöperation of the most representative Freemasons was accorded in a most generous and hearty manner. He desired to express his especial obligations to Bro. T. H. Openshaw, C.M.G., who was secretary of the lodge, and to Bro. Probyn-Williams, who had taken early steps with much energy in the severe work attending the formation of the lodge; but one and all worked heartily. The London Hospital is the fifth of the great metropolitan medical charities to attach to itself a masonic lodge, its predecessors being St. Bartholomew's (Rahere), St. Mary's (Sancta Maria), Middlesex (Middlesex Hospital), and Charing Cross (Chère Reine), whilst, as announced in another column, St. Thomas's will shortly add to the list a lodge to be called the Cheselden. The West London Hospital also has a lodge named the Cavendish, and we must by no means omit to mention the Æsculapius, which is not a hospital but a purely medical lodge and, we understand, enjoys much success. We wish the London Hospital Lodge a prosperous and useful career. The first Worshipful Master, Dr. Sansom, a well-known and esteemed member of our profession, is equally well known and esteemed in the masonic world, and under his experienced guidance the lodge starts with the best of auspices.

THE RÔLE OF SYPHILIS, ALCOHOLISM, AND UNHEALTHY OCCUPATIONS OF THE PARENTS IN THE ETIOLOGY OF IDIOCY.

IN a brief but important communication to the French Congress of Alienists and Neurologists made by Dr. Bourneville of the Bicêtre, Paris, and published in the *Revue Neurologique* of August 30th, it is stated that out of a total of 2072 boys suffering from chronic diseases of the nervous system (idiocy, imbecility, epilepsy, and various paralyses) the presence of hereditary syphilis was ascertained in 20 cases, or about 1 per cent. Among 432 girls there were only two cases of hereditary syphilis, or 0·2 per cent. Alcoholism, on the other hand, was a more prolific cause of disease, its presence being traced in over 40 per cent. of the cases. Thus of the total number of patients, both male and female, the family histories showed that in 38·5 per cent. of the cases alcoholic intemperance was present in the father and in 3·0 per cent. in the mother, while in the rest—viz., 1·5 per cent.—it was found in both parents. Among the unhealthy occupations in which the parents of the patients were engaged were the making of phosphorus matches, working in copper and in mercury, and especially the manufacture of white lead.

THE MEMORIAL TO SIR THOMAS BROWNE.

FOR some little time past a scheme has been on foot for the erection of a memorial to that bright ornament of the medical profession, Sir Thomas Browne. The memorial is to take the form of a statue to be erected in Browne's native city of Norwich, and in our issue of March 2nd, 1901, p. 649, we were enabled to announce that a sum of over £600 had already been received towards the expense of the statue. A correspondent now informs us that he has heard that a sum of between £300 and £400 is still wanting. The Royal College of Physicians of London have voted a subscription, but comparatively few of the members of the medical profession have individually supported the movement. This is not as it should be. In our issue of Jan. 12th, 1901, p. 113, we commented upon the action of Colchester, or rather the medical men of Colchester, in erecting a memorial to the memory of William Gilbert who laid the foundations of the science of magneto-electricity. We there pointed out how few memorials of our great men of science were to be found in this country and urged the medical profession as well as other members of the body politic to follow the example set by the medical profession of Colchester. Sir Thomas Browne comes perhaps in a different category to Gilbert, Sydenham, or Harvey. He did no great scientific work, so far as we know, but it is on record that "he was much resorted to for his skill in physic." He lived a quiet unostentatious life and did good by stealth. He was not free from the faults of his age and believed in the burning of witches. But despite this he was not unduly credulous, as his treatise "Pseudodoxia Epidemica" very well shows. In an age when religious

differences were very bitter he maintained a most tolerant mind. He was an earnest Churchman, a good friend, and one always ready to succour his neighbour, while by his writings he has enriched English literature with treasures which will be a possession for ever. Certain passages in the "Hydriotaphia," in the "Letter to a Friend," and in the "Religio Medici" have a music and majesty of diction which can be perhaps ohly paralleled by portions of the Prayer-book or the Authorised Version of the Bible. There are, we know only too well, many calls on our purses. Obligatory claims such as rates and taxes are more pressing than ever and coincidently many charities are suffering. But the sum required is not large. If every practitioner in England alone were to give but 1*s.* respectively twice the money required would be raised. It is not too much to hope that many of us could afford 10 or even 20 times 1*s.* Subscriptions may be sent to Mr. Frederic R. Eaton, King-street House, Upper King-street, Norwich, who is the honorary secretary of the memorial fund.

NEW LIVERPOOL ANTI-MALARIA CAMPAIGN ON THE GOLD COAST.

OWING to the generosity of a philanthropic merchant who desires to keep his name private, and to promises of assistance made to Major Ronald Ross by His Excellency Major Nathan, C.M.S., Governor of the Gold Coast, the Liverpool School of Tropical Medicine is immediately sending out Dr. Charles Balfour Stewart to undertake a campaign against malaria in that colony. He will proceed first to Sierra Leone in order to study the methods now being employed there with such success by Dr. Logan Taylor, to which we refer in another column, and will first attack the disease in the town of Cape Coast Castle, where, according to many reports, there is at present a considerable mortality among Europeans. Dr. Balfour Stewart will have full charge, under Major Ross's general direction, of the operations on the Gold Coast, and will probably be soon furnished with assistants. The line he will no doubt adopt will be that of drainage of the ground and clearing out broken vessels of water from the houses by means of large gangs of workmen, as has been done in Freetown. He is engaged for one year, but will probably remain as long as his services are needed for the great work which he is called upon to conduct in this rising and already important colony. He will shortly be able to pay special attention to the gold-mines, but his movements will be largely determined by the wishes of the Governor. Anti-malaria operations will thus shortly be in full swing all down the coast from the Gambia to Lagos—three of the colonies being dealt with by the Liverpool School of Tropical Medicine.

THE FIFTH INTERNATIONAL CONGRESS OF PHYSIOLOGISTS.

THIS Congress was held at Turin from Sept. 17th to the 21st. The attendance was large—more than double that of any of the previous meetings. The inaugural address was delivered to an audience of more than 200 members by the President, Professor Angelo Mosso of Turin, who proposed that the Congress as its first duty should appoint Sir Michael Foster of Cambridge honorary life president in recognition of the important share which he had taken in the foundation of International Congresses of Physiology. This proposal was, as we have already recorded, carried unanimously, as was likewise Professor Kronecker's that a bronze plaque with a suitable inscription expressive of their grateful acknowledgments of his services should be presented to Sir Michael Foster. It was also resolved to send a telegram to the Queen Mother in the name of physiologists of all nations thanking her for the impulse given to the study of human physiology through the construction at her initiative of the physiological laboratory on the top of Monte Rosa. Another telegram was despatched to the Minister of Public Instruction, Signor Nasi, thanking him for a subsidy which he had granted towards the organisation of the same laboratory. The scientific communications presented to the Congress were so many that those actually read had to be cut down to about one-half of the total number. The real business began on the second day of the meeting. Amongst the most interesting and well received of the papers contributed on that day were those of Professor Langley of Cambridge and Professor Sherrington of Liverpool, the former being on the Action of the Inhibitory Cardiac Fibres of the Vagus, the latter on the Comparative Excitability of the Cerebral Cortex in Monkeys and in Anthropoid Apes, a short abstract of which appeared in our issue of Oct. 5th. On the third day Mr. W. M. Bayliss of London demonstrated certain new and remarkable facts which he had observed in regard to the functions of the posterior spinal nerve roots in the production of vascular dilatation. Professor Langley on the same day gave another important demonstration regarding the action of nicotine on the substance of nerve ganglia, and Dr. Waller of London exhibited numerous photograms illustrating the electro-motor phenomena in various organs (the skin, the eye, and the electric organ of fishes), tending to show that every living tissue has the property of developing an electric current capable of detection by the galvanometer. Various experiments were shown in confirmation of the theory. During this day's sitting the presentation to Sir Michael Foster of the commemorative plaque was made amidst much enthusiasm. On the fourth and last day Dr. Locke of London aroused much interest by a beautiful demonstration of a method of keeping alive a rabbit's heart after its removal from the body by means of an artificial circulation through the cardiac vessels. It would occupy too much space to refer to the many other communications of equal importance by physiologists of other nationalities, and we have therefore spoken only of the English contributions. For scientific results this Congress will compare favourably with any of its predecessors, while for the interest of its proceedings it will stand out before all of them on account of the remarkable number of practical demonstrations and experiments with which each paper was illustrated. Among the social attractions of the Congress were a banquet, with the usual long toast and speech list, and a reception at the Communal Palace by the Syndic of Turin.

PROGRESS OF THE ANTI-MOSQUITO CAMPAIGN IN SIERRA LEONE.

DR. LOGAN TAYLOR, now carrying on operations against mosquitoes in Freetown on behalf of the Liverpool School of Tropical Medicine, reports on Sept. 17th that from the beginning of the work 6500 houses have been cleared of broken bottles, tins, calabashes, and the like, in which culex mosquitoes breed. Drainage operations against anopheles mosquitoes are also being pushed as much as the rain will allow. He adds: "I think there is no doubt but that the number of anopheles in the streets which we have dealt with is diminished. The people resident in the streets will tell you that at once. The number of pots and tins removed has made a considerable diminution in the culex." Dr. Taylor does not mention the number of cartloads of pots and tins removed, but from previous averages it may be put at something like 1300. Considering that the work had been in progress at the date of report for little over two months and has been much impeded by floods of rain the results are already very satisfactory. In addition to 50 other men two men are specially employed to look constantly after the centre of the town, where the offices, warehouses, and European houses are. The Governor, Sir Charles King

Harman, is giving every assistance. Dr. C. W. Daniels, of the London School of Tropical Medicine, who has been studying Dr. Taylor's work at Freetown and has now returned to England, says in a letter to Major Ross: "In my opinion already your efforts have been crowned with a large degree of success, as there has been a noteworthy diminution in the number of the first two genera of mosquitoes (anopheles and a kind of culex) found in the houses. The number of breeding-grounds has been enormously diminished."

THE DISTRIBUTION OF PLAGUE.

A TELEGRAM from the Governor of the Cape of Good Hope received at the Colonial Office on Oct. 2nd states that for the week ending Sept. 28th there was but one case of plague reported in Cape Colony, that of a person in the class of those under naval and military control—namely, a native in the remount camps at Port Elizabeth. There was 1 death, that of a native at Port Elizabeth. The area of infection remains unchanged. As regards the Mauritius a telegram from the Governor received at the Colonial Office on Oct. 4th states that for the week ending Oct. 3rd there were 54 cases of plague and 36 deaths. As regards Egypt, during the week ending Sept. 29th 4 cases of plague and 1 death from the disease have been reported from all Egypt. Of these cases 3 occurred among Europeans and 1 case and 1 death among the natives. From Alexandria 3 cases and 1 death were reported, and from Port Said 1 case.

ELIGIBLE BUILDING SITES!

THE conditions which apparently are responsible for the outbreak of scarlet fever in the Horton Grange district of Bradford are not without parallel elsewhere, while they show that the attention of local authorities when directed to new buildings erected in their districts should not be confined to the details of the structures to be erected. Dr. W. A. Evans, the medical officer of health of Bradford, has informed the Health Committee of the corporation that the outbreak is, in his opinion, due to what a head-line in a local newspaper describes as the "tipping system." This term does not refer to any alleged venality on the part of the sanitary authority, but describes a method resorted to for filling up depressions in ground which is destined to be built upon. We are most of us familiar with the aspect of these depressions, for we can hardly leave London and other large centres of population without seeing them from the railway-carriage window as we travel through the suburbs, and the method of filling them up which has prevailed at Bradford is not confined to that town. The depressions have usually been caused by the digging of ballast for railways, of road-metal, or of clay for the making of bricks for new suburban buildings, and the method adopted to fill the depressions when more building land is required is that of "tipping" as they phrase it at Bradford, or of "dumping" as our American cousins would call it, ash-pit refuse from the neighbouring urban district into the hollows which are frequently of considerable depth. It is quite clear that ash-pit refuse, which, of course, does not consist only of ashes, is in itself about as unsuitable a soil to build dwelling-houses upon as could possibly be invented, and a second cause has been found to operate at Bradford to foster the spread of disease in such tenements, for ash-pit refuse naturally subsides unevenly under the weight of a house, with the result that drain-pipes are broken and displaced and the conditions for the inhabitants of the houses built upon refuse become even worse than before. We note that the Bradford Health Committee hope that the Cleansing Committee will discontinue the practice of tipping refuse in the neighbourhood and also hope that the Building Committee will insist upon precautions such as concrete floors where refuse is built upon. It would be better, however, if the Bradford Corporation acting as a unanimous whole would embody the wisdom of its committees in measures for the disposal of refuse without tipping it into the Horton Grange or any other district, for concrete floors and foundations will merely partially protect the immediate neighbourhood of a house or cottage and will never make wholesome land out of the contents of scavengers' carts. Other methods of levelling such sites as those described will have to be adopted and the outbreak of scarlet fever at Bradford will have served a useful purpose if it proves a timely warning to local authorities there and elsewhere.

THE honorary secretaries of the Prince of Wales's Hospital Fund for London have received at the Bank of England the sum of 100 guineas from the King, who has been pleased to continue the annual subscription which His Majesty, as Prince of Wales, has hitherto contributed to this Fund.

AN address will be given by Mr. Thomas Bryant at Queen's Hospital, Birmingham, on Oct. 18th, at 4.30 P.M., on the occasion of the first distribution of clinical prizes since the University commenced work.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund held on Oct. 8th, Sir J. N. Dick, K.C.B., in the chair, the sum of £45 was distributed among the several applicants.

THE Harveian Oration will be delivered before the Royal College of Physicians of London on St. Luke's Day, Friday, Oct. 18th, at 4 P.M. by Dr. Norman Moore.

THE LATE AMIR OF AFGHANISTAN.

BY JOHN ALFRED GRAY, M.B. LOND.

THE report of the Amir's death has been officially confirmed; one may therefore accept it as true. So many times has his death been reported that one hesitated to accept the news as final till the official confirmation arrived. It is not that his death is an unexpected occurrence, but the news has been expected for so many years that one marvels that he has lived so long. I remember the last time I had the honour of attending His Highness during an illness, and I placed (in my own mind) his probable duration of life at two years; this was in 1890. I will endeavour to describe the condition that I found him in.

It was late one night in the autumn of 1890 that I was summoned hastily to the palace. There was a hammering at the gates of my courtyard which woke me, and immediately a servant came running to my room saying, "Up, Amir Sahib calls." One does not linger on these occasions. I found my horse saddled and bridled at the gate, and accompanied by the two horsemen who called me I rode off through the bazaars. The gleam of an occasional oil-lamp in the rain puddles made the darkness visible. Presently a clatter of hoofs showed my interpreter hurrying after us. This was satisfactory; for the two men might have been playing the part of "the Thing that walks by night," in which case I should not have been seen again. This happens at intervals in Kabul We reached the palace, and leaving our horses at the gate hurried through the gardens to the Amir's pavilion.

I found His Highness lying on a couch, rolling his head from side to side and groaning. Malek, the favourite page-boy, was rubbing the right knee. The room was brilliantly lit with candles and around were kneeling Prince Habibullah and his brother and the chief officers of State. Receiving the Amir's command, I proceeded to examine into his condition. The right shoulder, elbow, wrist, and knee were swollen, red, and very painful. Every few minutes he was passing a few drops of scalding urine, his breathing was hurried, and his pulse quick and weak. His throat was sore and inflamed. There was a crepitant patch on the left axillary line. The heart was somewhat enlarged, but I heard no murmur. His

temperature, to the best of my recollection (for I am writing without notes), was 102·4° F. His urine was loaded with albumin and he had not slept for days. But this was not all. It appears that he had been ill for some weeks under the care of hakims. He had been treated with many violent purges, much leeching, and copious bleedings, and his gouty foot had been frequently plunged into ice-and-water to relieve the pain. Altogether his condition appeared to me serious—more than a little serious, for I was informed by those friendly to me that my life depended on his. I therefore considered what I should do. A lamp was brought and with a page-boy—the foster-brother of Prince Habibullah—I went to the hospital to get what drugs I needed. These were given into the charge of the lad. He was in future to be responsible for them and to give them out only to me.

To be brief, I gave His Highness diaphoretics with salicylate of potash, which I made fresh for every dose. His Highness, after the Mahomedan custom, uttered a short prayer before he took the first dose. I did also. The medicine had a most satisfactory effect in relieving the pain and procuring sleep. The improvement being so obvious it was interesting to note the delight of all, from prince to page-boy. I have a sheaf of letters of congratulation by me from the Sultana and Prince Habibullah, to whom I had every morning to send a report. The politeness and distinction with which I was treated by everyone may be imagined. But this was not the end. Towards the end of the week I gradually dropped the use of salicylate on account of its depressing effect and one night there was some return of pain.

There was a person at the Court—a Hindustani—who was unfriendly to me and he seized this opportunity of whispering to the Amir what he could that would prejudice me with His Highness, saying that I was giving him "shrab" in all his medicines which must inevitably make him worse in the end, and so on. The Amir was weak with long suffering—he had had a return of pain—and he believed this person. I was informed in the morning, five days after I took the case in hand, that my treatment would be suspended for the present. The hakims were reinstated. What can one do under circumstances so exasperating? The hakims knew no medicine or pathology; they were again in charge of a life on which mine hung and they were likely to terminate it. Reasoning would have no effect; my statements would not appeal to the Oriental mind. I decided, therefore, to accept the inevitable, but I thought that I would shoot that interfering person who was my enemy. I said so; and he kept out of my way. His interpreter, however, told me that I should lose caste by shooting one of low degree. I, of course, would not have shot him—one does not do such things in cold blood. At this time the Sultana was taken ill and I had the Amir's order to attend her in the harem serai. From Her Highness and the page Malek I heard how it was that I had been suspended.

To cut a long stay short—for even now I do not care to recall too vividly to my recollection the anxious weeks that followed—His Highness, after a period of considerable danger and suffering, during which I was allowed to watch his progress daily, made a tedious recovery, and I was permitted to return home on leave for some months bearing with me a substantial token of the Amir's goodwill.

I read that Prince Habibullah has the arsenal and treasury, and consequently the power, in his hands. It is a blessed thing for Afghanistan if it is so, and for England too, so far as I can judge. The death of the Commander-in-Chief, Gholam Hyder Khan, deprives the Sultana of her greatest supporter, so that the probability of a revolution in favour of her young son, Prince Mahomed Omer (who is Royal on both sides), is vastly lessened. This lady, however, is a source of probable danger to the peace of Afghanistan—that is, if she is still living.

Habibullah always struck me as a good fellow—intelligent, well-mannered, and distinctly favouring the English. He was learning English when I was in Kabul and could speak a little even then. He seemed a milder and smaller copy of the able, courteous, chivalrous, crafty, and fierce Prince, his father, whose strong personality had such a glamour that he attracted not only the respect, but even the affection, of us who were in his service. I have the recollection of many great kindnesses from my late Royal master (and of some injustices), and I wish his son the Prince Habibullah every success for the sake of his country and ours in the difficult and dangerous task before him.

Baling.

Looking Back.

FROM

THE LANCET, *SUNDAY, OCTOBER* 12, 1823.

Extract from a Surgical Lecture delivered by Sir ASTLEY COOPER, Bart., *at St. Thomas's Hospital on Oct. 8th, 1823.*

The next subject is

INFLAMMATION.—There are four signs that commonly attend it, viz. redness, pain, increased heat, and swelling.

First, redness. This arises from an increase of the red particles of blood in the part; this is particularly exemplified in the white of the eye during inflammation

Second, swelling or tumour is owing to the greater determination of blood to the affected part; it is not altogether owing to this circumstance, but arises in a great measure from an effusion of serum into the cellular membrane; a portion of this coagulates; hence the hardness of the inflamed part.

Third, increased sensibility is owing to distension of the nerves. Parts naturally insensible are quite the reverse when in a state of inflammation. Sir Astley was called a short time since to a case where it was requisite to saw off a piece of bone; during the operation, he opened a cavity in which was a small piece of bone and a fungus; the latter was extremely sensitive; extract of belladonna applied to it gave instant ease. Bones, though destitute of sensation in their healthy state, are dreadfully painful when inflamed. It is exceedingly improper to perform operations upon parts when inflamed.

The fourth is increased heat.

Mr. Hunter denied this: he introduced a thermometer into the opening when operating for hydrocele, and it rose to 101: after 24 hours it was no more than 100. Though no increase of heat is evinced in internal inflammation, yet when the malady is on the surface of the body, an alteration of seven degrees takes place; as on the inside of the thigh, where a blister was applied, the thermometer rose to 90, while on the inside of the opposite thigh it only reached 83.

Inflammation has four terminations.

First, adhesion. This arises from coagulable lymph being thrown out into the cellular membrane, and the parts become glued together.

Second, suppuration, or secretion of matter. This is composed of particles nearly similar to those of the blood swimming in a fluid which supports them and this fluid coagulates.

The third is absorption or ulceration, which eventually arises from continued pressure, thereby allowing the escape of the extraneous body.

The fourth is the destruction of life. Enfeebled by excessive action, the blood towards the extremities becomes coagulated, and gangrene is formed.

The constitutional effects are similar to those of the disease mentioned in the last lecture.

The inflammation is healthy or unhealthy. No wound can be restored without the former; even the little wound made in bleeding would inevitably destroy life, were it not for this salutary principle. A slight inflammatory action throws out upon the edges of the wound adhesive lymph, by which the edges are permanently united.

When a ligature is put upon a large artery, unless inflammation supervened, it could not be of any use; the first thing nature does in this case is to form a clot of blood at that part of the vessel where it has been tied, inflammatory action taking place, adhesive matter is thrown out, and the plug of blood and internal coats of the artery become firmly glued together, so as to prevent the possibility of hæmorrhage when the ligature comes off: should the constitution be in an unhealthy condition, however, this process would not be executed, so that upon the ligature's coming off, the person might die of hæmorrhage. Spontaneous inflammation is generally unhealthy.

Sir Astley concluded by observing, that he had expected to have reached the subject of specific inflammation; but as there was not time, he would begin it on Monday next.

THE ARMY AND INDIAN NURSING SERVICE.

MR. BRODRICK'S Committee appointed to consider the Reorganisation of the Army and Indian Nursing Service, consisting of the same members as the Committee on the Reorganisation of the Army Medical Services, has drawn up the following report:—

SCHEME FOR THE REORGANISATION OF THE ARMY AND INDIAN NURSING SERVICE.

1. There shall be one Military Nursing Service for His Majesty's Army in the United Kingdom, India, and the Colonies, to be designated "Queen Alexandra's Imperial Military Nursing Service" (Q.A.I.M.N.S.). In this service shall be amalgamated the existing Army Nursing Service and the Indian Nursing Service.

2. Her Majesty Queen Alexandra shall be requested graciously to assume the presidency of this service.

3. The Nursing Service shall be under the immediate control of Her Majesty Queen Alexandra as president, and of a Nursing Board constituted as follows:—

President.—Her Majesty Queen Alexandra.
Chairman.—The Director-General, Army Medical Service, or an officer nominated by him.
Two members of the Advisory Board, Army Medical Service, of whom one shall be a civilian.
The Matron-in-Chief, Queen Alexandra's Imperial Military Nursing Service.
Three matrons of large civil hospitals with medical schools.
One representative of the India Office to be appointed by the Secretary of State for India.
Two members to be nominated by Her Majesty the President, and holding office for three years.

4. Upon this Nursing Board the civilian members of the Advisory Board, Army Medical Service, and the matrons of civil hospitals shall be appointed by the Crown, on the advice of the Secretary of State, and shall hold office for a period of three years, renewable on expiration of the term of appointment.

A matron of a civil hospital shall receive an honorarium of £26 5s. per annum while serving on the Board.

5. The Nursing Board, of which three shall form a quorum, shall usually meet at fortnightly intervals. The minutes of the proceedings of the Nursing Board shall be laid by the Matron-in-Chief before the Advisory Board. It shall be in the power of the Advisory Board to refer back any point to the Nursing Board for reconsideration, and in case of a divergence of opinion between the boards, the matter in question shall be referred to the Secretary of State.

6. Subject to the general control of the Advisory Board the Nursing Board shall be responsible for—

(1.) Advising the Secretary of State upon the strength of the nursing staff of various grades requisite in each military hospital (including the hospitals for women and children attached to military stations), having regard to the character of the cases admitted, and subject to the proviso that as a general rule hospitals containing fewer than 100 beds will not be provided with a regular female nursing staff (*vide* paragraph 14).
(2.) Defining the conditions under which nurses may enter the service, the terms of their appointment, and the duties to be performed in the several grades of the Nursing Service.
(3.) Dealing with all questions relating to the uniform and clothing allowance of the Nursing Service.
(4.) Receiving and considering reports from the Matron-in-Chief and the matrons of the various hospitals.
(5.) Recommending to the Commander-in-Chief, for the approval of the Secretary of State, the appointment, retention, promotion, retirement, dismissal, and distribution of the members of the Nursing Service.
(6.) Arranging for the selection and engagement of additional nurses, the organisation of the requisite nursing staff, and the appointment of principal matrons in case of war or epidemic.
(7.) Advising the Secretary of State upon the formation of the Nursing Reserve of the Queen Alexandra's Imperial Military Nursing Service.
(8.) Arranging for the periodical inspection of military hospitals as regards nursing efficiency.
(9.) Submitting to the Secretary of State, through the Advisory Board, a scheme for the organisation and development in India of the Queen Alexandra's Imperial Military Nursing Service, which shall allow for adequate local control, subject to the general authority of the Nursing Board.

7. The Queen Alexandra's Imperial Military Nursing Service shall consist of—

(1.) A Matron-in-Chief and Principal Matrons.
(2.) Matrons.
(3.) Sisters.
(4.) Nurses.

8. All matrons, sisters, and nurses of the Queen Alexandra's Imperial Military Nursing Service shall be entitled to wear an appropriate badge which, by special permission only of Her Majesty the President, may be retained by the wearer after leaving the service.

9. The Matron-in-Chief shall have a seat on the Advisory Board, acting as a member of the Board whenever matters concerning the Nursing Service are under discussion, and in her absence a principal matron shall take her duties.

10. The Matron-in-Chief shall be the medium of communication between the Director-General and the Queen Alexandra's Imperial Military Nursing Service, in all matters connected with that service.

11. The Matron-in-Chief shall be responsible for keeping the service records and confidential reports from the matrons of the various hospitals regarding the character, conduct, and efficiency of the sisters and nurses under their control.

12. The Matron-in-Chief shall keep herself acquainted with the administration of the nursing service in the various military hospitals.

13. She shall submit to the Nursing Board recommendations for the appointment, promotion, retirement, dismissal, and distribution of members of the service.

14. She shall be responsible for maintaining a sufficient staff of special nurses, detailing them for duty in cases of emergency, or for service in smaller hospitals.

15. She shall present every year to the Nursing Board a scheme for the annual leave of matrons and special nurses, and shall report to the Board the arrangements made by matrons for the annual leave of sisters and nurses.

16. Amongst the duties of a matron, to be defined in detail by the Nursing Board, shall be the following:—

(1.) To recommend suitable candidates for admission to the service in accordance with the prescribed regulations.
(2.) In conjunction with the medical officer in charge of the hospital to forward to the Matron-in-Chief such confidential reports with regard to the work and conduct of the nursing staff as may be required, and to make recommendations for retention, promotion, retirement, and dismissal.
(3.) To be responsible for the general nursing arrangements of the hospital, for the due performance of their duties by the sisters and nurses, and for the maintenance of good conduct, efficiency, and discipline amongst all members of the female nursing staff. In conjunction with the medical officer in charge of the hospital to report upon these matters at stated intervals to the Nursing Board through the Matron-in-Chief.
(4.) To exercise similar functions as regards the hospital for women and children in a station where such hospital exists.
(5.) In urgent cases to provide, where practicable, for the nursing of women and children on the married establishment.
(6.) To engage and dismiss the female servants appointed to attend upon the nursing staff, and to be responsible for their discipline, good conduct, and efficiency.
(7.) To undertake the daily inspection of the nurses' quarters to ensure that they are clean, well ventilated, and kept in good order.
(8.) To be responsible to the medical officer in charge of the hospital for sufficient supply, good condition, and cleanliness of the bedding and linen in the nurses' quarters and the wards under her nursing charge.
(9.) To see that proper medical and nursing attendance is

provided without delay for sick members of the nursing or female domestic staff.

(10.) To arrange the annual leave of sisters, nurses, and female domestic staff, reporting thereon to the Matron-in-Chief.

17. A principal medical officer shall report annually to the Nursing Board, through the general officer commanding, upon the conduct and efficiency of the matrons of hospitals within his district.

18. Amongst the duties of a sister in charge of a ward, to be defined in detail by the Nursing Board, shall be the following:—

(1.) To be responsible for the cleanliness, ventilation, and good order of her ward and its annexes.

(2.) To attend the medical officers in their visits to the ward, and carefully to carry out their orders with regard to the diet and treatment of patients.

(3.) To see that the nurses and orderlies perform their duties punctually and efficiently, reporting any breach of discipline or neglect of duty on the part of a nurse to the matron, and on the part of an orderly to the medical officer in charge of the ward, or in his absence to a warrant or non-commissioned officer of the Royal Army Medical Corps.

(4.) To take part in the nursing of all patients seriously ill.

(5.) To be responsible to the matron and medical officer of the ward for sufficient supply, good condition, and cleanliness of the bedding and linen, and for the personal cleanliness of the patients.

19. Amongst the conditions under which nurses may enter the service, and the terms of their appointment (to be defined in detail by the Nursing Board) are the following:—

(1.) A candidate must be of British parentage, be between 25 and 35 years of age, and possess a certificate of not less than three years' training and service in medical and surgical nursing in a civil hospital recognised by the Advisory Board. She shall be required to satisfy the Nursing Board that as regards education, character, and social status she is a fit person to be admitted to the Queen Alexandra's Imperial Military Nursing Service.

(2.) If provisionally accepted she shall be placed on probation for a period of three months, at the end of which time, if her work and conduct are reported to be satisfactory by the matron of the hospital, she may, after having been medically examined, enter into an agreement binding herself to three years' service in the Queen Alexandra's Imperial Military Nursing Service and undertaking to conform to the rules and regulations of the service. The agreement shall be dated from the time at which the nurse was provisionally accepted, and may, on the recommendation of the Commander-in-Chief, be terminated at any time by three months' notice from the Secretary of State, or in case of grave breach of discipline or misconduct, without notice.

(3.) On the expiration of her three years' term of service a nurse may be permitted—

(*a.*) To retire from the service.

(*b.*) To continue in the service as a staff nurse, with an agreement terminable at any time by one month's notice on either side.

(*c.*) To join the staff of special nurses under the orders of the Matron-in-Chief, with an agreement terminable at any time by one month's notice on either side.

(*d.*) To offer herself for promotion to the post of sister, undertaking to serve for at least one year, and afterwards under an agreement terminable at any time by one month's notice on either side.

(*e.*) To enter into a fresh agreement for service as nurse or sister in India, or elsewhere abroad, for a period of three or five years, according to climate.

20. All present members of the Army and Indian Nursing Service, and members of the Army Nursing Reserve who have been in military employment during the war in South Africa, shall be eligible for appointment in the Queen Alexandra's Imperial Military Nursing Service if recommended by the Nursing Board. Should any question arise as to their status in the Queen Alexandra's Imperial Military Nursing Service the Nursing Board shall report thereon to the Advisory Board, and the recommendation of the Advisory Board shall be submitted to the Commander-in-Chief, whose decision shall be final.

21. Any present member of the existing services who is not retained in the Queen Alexandra's Imperial Military Nursing Service may be recommended for a gratuity of one month's pay for each year of service, if she is not entitled to a pension; and any member who may decline to accept the new terms of employment shall be allowed to serve upon the terms of her present engagement.

22. PAY.

(a.) Nursing Staff—

Matron-in-Chief, £250 a year, rising by annual increments of £10 to £300, and lodging allowance.

Principal matron in India, £230 a year, rising by annual increments of £10 to £280, and lodging allowance.

Principal matrons, £110 a year, rising by annual increments of £5 to £160.

Matrons, according to size of hospital, £70 to £100 a year, rising by annual increments of £5 to £120 to £150.

Sisters, £37 10s. a year, rising by annual increments of £2 10s. to £50.

Nurses, £25 a year, rising by annual increments of £2 10s. to £35.

(b.) Female servants—

£15 a year, rising by annual increments of £1 to £20.

23. ALLOWANCES.

(a.) Nursing Staff—

Home station, board and washing, 15s. a week.
Station abroad, board and washing, 21s. a week.
Station abroad, washing, 3s. 6d. a week.
Home station, uniform, £6 per annum.
Station abroad, uniform, £7 per annum.
Home and abroad, cloaks, £2 per annum.

(b.) Female servants—

Board and washing, 10s. 6d. a week.

24. Allowances at the recognised scale shall be given for Indian and Colonial service.

25. The regular annual leave of members of the Queen Alexandra's Imperial Military Nursing Service in home stations shall be as follows:—

Matrons, six weeks.
Sisters, five weeks.
Nurses, four weeks.

Leave at stations abroad shall be granted on the military system.

26. It is desirable that all members of the Queen Alexandra's Imperial Military Nursing Service should be eligible to apply for a pension at the age of 50 years, and should be retired at the age of 55 years. Rates of pension shall be according to the scale laid down in Article 1233, Royal Warrant for Pay and Promotion.

ST. JOHN BRODRICK.
E. W. D. WARD.
G. DE C. MORTON, Major-General.
JAMES WILLCOCKS, Colonel.
FREDERICK TREVES.
WILLIAM THOMSON.
W. R. HOOPER, Surgeon-General.
G. H. MAKINS.
HOWARD H. TOOTH.
ALFRED D. FRIPP.
ALFRED KEOGH, Lieutenant-Colonel, R.A.M.C.
ALEX. OGSTON.
E. C. PERRY.
H. E. R. JAMES, Major, R.A.M.C., Secretary.

MEDICAL SCHOOL DINNERS.

King's College Hospital.—The annual dinner of the old students of King's College Hospital was held at the Hotel Cecil on the evening of Oct. 1st, the day on which the medical session was opened. The occasion was distinguished by the fact that an unusually large number of the senior old students were present. These included the chairman, Mr. Paul Swain of Plymouth, Mr. Christopher Heath, Colonel H. Cayley, I.M.S., C.M.G., Mr. Wharton P. Hood, Dr. A. B. Duffin, and many others who have gained a high position in practice. It was the fiftieth anniversary of the day upon which Dr. Duffin (who has recently retired from the staff of the hospital) entered King's College as a student, a circumstance which greatly attracted his friends and contemporaries to the dinner. The Rev. Henry Wace, D.D., the late Principal

of King's College, and the Rev. A. Robertson, the present Principal, were also present, and among the old students of more recent years were Sir John Alexander Cockburn, K.C.M.G., and Captain C. Vipan, D.S.O., gentlemen who have abandoned the practice of medicine and gained distinction in other fields, the former as a statesman in Australia and the latter as a combatant officer with the 3rd Buffs in South Africa. The members of the present staff of the hospital were nearly all present, while one or two of the old students had become qualified during the present year. In his speech the chairman alluded to the great past of King's College Hospital, as proved by the fact that each of the following old students, Mr. Christopher Heath, Mr. G. Lawson, Mr. N. C. Macnamara, Mr. W. Rose, and Mr. A. B. Barrow, is now senior surgeon to a London hospital, and as evidence that the eminence of the present staff is equal to that of their predecessors he mentioned the distinction of C.B. which has just been conferred on Mr. Watson Cheyne and Mr. G Lenthall Cheatle for their work in South Africa, and that Dr. G. F. Still has been appointed Gulstonian Lecturer at the Royal College of Physicians of London.

Middlesex Hospital.—On Oct. 1st, at the Trocadéro Restaurant, Piccadilly, a large and enthusiastic gathering of the past and present students of this institution was held. Of about 200 guests who accepted the invitation of the school council 174 were actually present. The chair was taken by Mr. J. Bland-Sutton who was supported by Lord Howard de Walden, who had distributed the prizes in the afternoon, and also by Alderman Sir William Treloar. After the loyal toasts had been honoured the toast of "The Services" was responded to by Lord Howard de Walden, who had taken an active part in the South African campaign, including the relief of Kimberley and subsequent operations. His Lordship spoke in high praise of the magnificent pluck and stoical endurance of the British soldier and the ever-ready skill and resourcefulness of the medical department. In speaking of the Middlesex Hospital and Medical School the chairman alluded with warm approval to the energy and grasp of modern requirements evinced by the Weekly Board and School Council in the equipment, maintenance, and extension of the hospital and school. This was emphasised in detail by the replies of Mr. G. B. Hudson, M.P., and the Dean. The former dwelt in his speech upon the recent opening of the new wing for the treatment and investigation of cancer and the enlargement of the wards in the north-east portion of the hospital. The Dean, though deploring the falling-off in the number of students which affected most, if not all, the London medical schools, congratulated those present on the quality of the men now turned out, alluding to the greater number attaining the higher degrees and recording the attainment of gold medals in medicine and anatomy in London University in the past year. The toast of "The Past and Present Students" was responded to by Mr. John Ackery, President of the Odontological Society of Great Britain, and by Mr. T. W. Scott, the senior Broderip Scholar of the year. The toast of "The Visitors" was proposed by Dr. William Duncan and responded to by Mr. Wilhelm Ganz who, with the assistance of Señor Guetary and Herr Kolni-Balozky, rendered an exquisite musical programme which added greatly to the success of the evening. The proceedings closed with the proposal of the Chairman's health by Dr. Sidney Coupland who alluded to his successive attainments in anatomy, morphology, and pathology.

St. Mary's Hospital Annual Dinner.—The St. Mary's Hospital annual dinner took place on Oct. 3rd in the Whitehall Rooms of the Hôtel Métropole. The guests of the evening were those members of the hospital, some 24 in number, who have recently returned from service in the South African war, and nearly 200 of the past and present students were there to do them honour. The chair was taken by Brigade-Surgeon-Lieutenant-Colonel A. B. R. Myers, who was supported by Sir William Broadbent, Mr. Edmund Owen, Mr. Herbert Page, Dr. D. B. Lees, Mr. G. A. Critchett, Mr. G. P. Field, Mr. H. E. Juler, Dr. M. Handfield-Jones, Mr. J. Ernest Lane, Mr. H. G. Plimmer, and Dr. H. A. Caley. The toasts of "The King" and then of "Queen Alexandra, the Duke and Duchess of York, and the rest of the Royal Family" were proposed by the Chairman in a few well-chosen words and were duly honoured. Mr. Page, who met with a great welcome, then proposed the toast of "The Imperial Forces." He remarked that this was the first occasion on which he had given the greater toast of "The Imperial Forces"; hitherto it had always been "The Navy, Army, and Auxiliary Forces." This signalised a new phase in the expansion of our empire, the union of men of every country under one King. He referred with approbation to the new scheme for the reform of the Royal Army Medical Corps and declared that the medical schools must do their part: there must be no more boycotting of the service. St. Mary's, he said, had sent of her best to South Africa, and it was a great pleasure to him to propose the toast.—Fleet-Surgeon T. J. Preston responded for the Navy, Lieutenant-Colonel G. M. Giles, I.M.S., for the Army, and Mr. H. Stansfield Collier, V.M.S.C., for the Auxiliary Forces.—The Chairman then proposed the toast of "Prosperity to St. Mary's Hospital Medical School." He alluded to the honoured names of former members of the hospital staff and paid a graceful tribute to the exertions of Sir William Broadbent and Mr. Field on behalf of the school. He complimented the present staff on their success as teachers, and the students of to-day both on their achievement in the examination hall and on their prowess in the athletic field.—The Dean (Dr. Caley) responded for the school, and alluding to the effort on foot to complete the Clarence wing said that the board of management looked forward with every confidence to an early consummation of their endeavours. He also spoke in hopeful terms of the negotiations now in progress to provide a sports ground for the students.—Mr. Owen, in a characteristic speech, gave the health of those who had served in South Africa and paid an eloquent tribute to those who had fallen.—Thanks were returned by Mr. Wallace Ashdowne, surgeon to the Imperial Yeomanry Base Hospital; Mr. V. Warren Low, civil surgeon; and Mr. E. L. Jenkins, one of the dressers of the Welsh Hospital. A most successful evening was brought to a close by the toast of the health of the Chairman which was given by Sir William Broadbent and drunk with great enthusiasm.

(To be continued.)

THE ANNUAL REPORT OF THE CHIEF INSPECTOR OF FACTORIES AND WORKSHOPS FOR THE YEAR 1900.

SECOND NOTICE.[1]

ATTENTION has been directed to a curious practice which has sprung up amongst the manufacturers of textile fabrics by which they habitually defrauded their workpeople by paying them for a smaller quantity of work than that which they actually performed. In this case we were glad to be able to record the fact that by means of a statutory provision specially passed for the purpose this nefarious custom has been practically abolished. At the present time, however, it appears that the workmen in many cotton-mills suffer greatly from the dishonesty of their employers, who exact from them an amount of work considerably in excess of that for which they are actually engaged. Two inspectors, Mr. Crabtree of Oldham and Mr. Dodgson of Bury, call attention to this matter. The practice is an old one in the cotton trade, for Mr. Crabtree himself when a boy 30 years ago was subjected to the treatment. He points out, however, that the custom has become more general and that at the present time "nearly every cotton-mill cribs time." "Time-cribbing" is a well-known expression in the districts of Oldham and of Rochdale. The method adopted by the manufacturers is thus described: "In these defaulting factories the manufacturing process too often begins at 5.30 to 5.55 A.M., continues to 8.5 A.M., is resumed at 8.25 A.M., and stops at 12.35 to 12.37 P.M.; it begins again at 1.25 P.M., and continues to 5.35 P.M. There is thus over 30 minutes deliberate illegal overtime put in on each of five days in the week, and about 15 minutes on Saturday, or about 160 minutes per week. That is to say, the day hands in these factories have to work two and a half hours per week more than should be demanded of them, and for this illegal demand they do not even receive the recognition of payment." Mr. Dodgson says that the evil is almost entirely confined to the cotton factories and that in the Rochdale district the manufacturers of cotton fabrics are greater offenders than the spinners of yarns. In commenting on these reports Mr. H. S. Richmond,

[1] The first notice appeared in THE LANCET of Sept. 28th, 1901, p. 868.

His Majesty's superintending inspector of factories for the North-Western Division of England, suggests that the duties of inspectors would be simplified and the practice of time-stealing reduced if a fixed and substantial penalty could be exacted should the main engines be set to work before, or allowed to run after, the legal hours. In favour of this proposal he points out that "the engine-house is usually more accessible than the factory itself and the fact of its running more easy of proof than illegal work by individual hands." The matter appears to deserve the attention of the Chief Inspector. The present state of things seems to be most iniquitous. It is difficult at first sight to see why it cannot be remedied, but Mr. Dodgson's report contains this cryptic sentence "It [the evil] is difficult to detect because the whole community where it prevails is favourable to it." It is not easy to understand how those members of the community whose time is stolen (or "cribbed") without the "recognition of payment" can really be in favour of such a practice.

The report of the medical inspector (Dr. T. M. Legge) contains a table showing the number of cases of poisoning from lead which were notified. In this table the statistics for the last three years are given. The number of cases of lead-poisoning reported in the year 1898 amounted to 1278, in 1899 to 1258, and in 1900 to 1058. These figures, the medical inspector points out, are strictly comparable. Second notifications of persons already included in the return within the preceding 12 months are not regarded as fresh cases. In the year 1900, 53 second notifications were made in the case of people who had been previously reported. In the year 1899 there were 52 such instances. The object of notification of "industrial lead-poisoning" is the subject of a memorandum by Dr. Whitelegge (Appendix 17, p. 119). This memorandum was issued in March, 1900, and is supplementary to one issued in December, 1898. It deals with the manner in which cases occurring in house painters and plumbers should be treated by the Home Office inspectors for statistical purposes and with the way in which recurring attacks of lead-poisoning should be notified. The object of notification is to obtain a clue to those conditions which are not only prejudicial to health but which are also conditions over which the factory inspectors can exercise control. Under the present law only those cases which occur from the effects of labour carried out in a factory or workshop are of interest to the inspectors, for the Home Office has no power beyond these limits. Lead-poisoning contracted in the course of any business which is not under the control of the Factory Acts obviously cannot, therefore, be dealt with under those Acts. Dr Whitelegge justly points out that in the present circumstances it would be practically useless for such cases to be reported as any reports of the kind being non-statutory would be incomplete and would therefore have but little statistical value. The conditions under which the notification of lead-poisoning should be made are briefly that in the opinion of the medical practitioner (1) the patient is suffering from the disease and (2) that it was contracted in a workshop. In regard to the first of these points it may be well to mention that patients have been reported as suffering from lead-poisoning when the only sign pointing to the disorder has been the presence of a blue line on the gums. The question as to whether lead-poisoning was or was not contracted in a factory or workshop has frequently given rise to difficulty and to the expenditure of much time. The best example of such a case is that of a house painter. In the case of any ordinary journeyman the difficulty of course does not arise, for he is outside the protection of the Home Office. But if a house painter should spend part of his time in a factory or workshop, and is occupied in such work as the grinding of lead or of pigments, or in mixing lead paints, he immediately comes under the care of the Home Office and "the question may legitimately arise whether his case does not become reportable, seeing that the risk, though in minor degree, is incurred in the workshop as well as in the out-door work." In such cases an enormous amount of work which is often fruitless is not infrequently thrown upon the inspectors. It has happened that after laborious inquiry, not only by the inspectors but also by the certifying surgeons, no ground has been discovered for assuming that the poisoning was effected at the factory. Several of the inspectors in their reports write feelingly of the loss of time which has been caused by investigations of the kind described. Here, for example, are instances. "Much valuable time was wasted in making inquiries into cases of lead-poisoning occurring among house painters." (Mr. Johnson, West London, p. 156.) "General work has been much hindered by the necessity of investigating cases of lead-poisoning, or alleged lead-poisoning." (Mr. Blenkinsopp, West London, p. 155.)

During the year 1900 not less than 199 cases of lead-poisoning amongst house painters and plumbers were reported—these were of course excluded from the total given by the medical inspector which contains only cases reported under Section 29 of the Act of 1895. It may be of interest to give the numbers of those affected in the case of the principal trades: china and earthenware, 200 (49 less than in the previous year); litho-transfer works, 10; glass-polishing, 7; smelting, 34; turning and enamelling, 16; file-cutting, 40; white lead, 358 (41 less than in the previous year); paints and colours, 56; coachmaking, 70; ship-building, 32; electric accumulation works, 33; other industries, 202. An excellent analysis of the reports on lead-poisoning by the certifying surgeons is given by the medical inspector (p. 435). In this table information is given as to the exact occupations in which the poisoning was contracted, and the cases are, as far as possible, classified as "severe," "moderate," and "slight." There is also a tabular statement of the chief symptoms present, from which it appears that in the case of men 83·2 per cent. had gastric symptoms, 12·9 per cent. suffered from anæmia, 4·7 per cent. from headache, 12 per cent. from paresis, 3·1 per cent. from cerebral symptoms, and 5·9 per cent. from "rheumatic" symptoms. It seems curious that gout does not occur in the list. The women suffered less from gastric symptoms, to about the same extent from anæmia, to a much greater extent from headache, very much less from paresis, and more from cerebral symptoms and from rheumatic pains. The medical inspector is of opinion that the slower form of lead-poisoning brought about by the absorption of metallic lead and of the lead salts in the form of paint produces a more serious condition that that which is caused by the inhalation of dust or of fumes. Severe cases amongst file-cutters and coach- and ship-painters are common. The importance of both the age distribution and of the amount of time relatively spent by the different classes of workmen in the respective trades deserves consideration in this connexion. The following table is quoted as the most ready method of making these matters clear:—

Source of poisoning.	Age.		Duration of employment.	
	Under 30 years.	30 years and over.	1 to 5 years.	5 years and over.
	Per cent.	Per cent.	Per cent.	Per cent.
Metallic lead	43·0	57·0	37·4	62·6
Salts of lead as paint	43·6	57·4	45·8	55·2
Salts of lead as dust	65·4	34·6	76·0	24·0

A study of the table considered in the light of a knowledge of the processes of the trades in which lead and its salts are used shows the preventive measures which should be adopted. The immediate removal of the dust is the essential preventive measure in china and earthenware factories, in places at which processes connected with white and red lead are carried on, in paint and colour factories, in all work-rooms in which operations of litho-transfer are conducted, and wherever iron plates are enamelled. The medical inspector is of opinion that 90 per cent. of the cases of poisoning which occur in these trades are due to neglect in the immediate removal of the dust, some of which therefore is inhaled by the workers. In trades in which metallic lead paints are used the essential point is that the workmen should wash. In such trades Dr. Legge believes that 90 per cent. of the cases of poisoning are due to the absence of this simple precaution. In this matter the workmen are often to blame. In some cases, however, the employers have been distinctly at fault. A rather interesting case to the point is reported by the inspector for the North-western division of England (p. 304), but unfortunately it was not fought out to the end. A brass finisher brought an action in the Manchester County Court before His Honour Judge Parry to recover damages from his former employers because he had become poisoned by lead

in the course of his work. He had in the ordinary course of his occupation to use white lead for the purpose of putting fittings together. After the fittings were put together he had to suck them with his mouth to see if they were air-tight or not. A pump ought properly to have been used for this purpose but the one instrument provided was suitable for large work only. Under the Factory Acts the employers are required to provide suitable washing appliances for the use of the workpeople. The plaintiff in cross examination admitted that a bucket was provided in which they could wash and that they could have soap if they asked for it and there were some "fents" in the room to serve as towels. The judge remarked that the Act required suitable lavatory accommodation. "Suitable washing conveniences should be supplied," he said, "but there were nothing but inconveniences apparently." The case ended by the payment to the plaintiff of £45 and costs.

The medical inspector has done much to bring the importance of washing prominently to the notice of lead-workers. A leaflet on "Lead-poisoning: How Caused and How Best Prevented," has been written, and no less than 10,000 copies have been distributed to those chiefly interested in the matter. The leaflet contains a great deal of excellent advice clearly given. One paragraph might, perhaps, with advantage have been put differently or omitted. It bears on the importance of not inhaling or swallowing lead and is preceded by an excellent sentence: "Carefulness while at work and cleanliness offer the best means of escaping attacks of lead-poisoning." The writer of the pamphlet then proceeds to say, "Those who work in lead should keep in mind every hour of every working day the importance of not breathing lead-dust and not carrying lead to the mouth in any way." Such a constant thought would hardly lead to a happy mental state.

The number of printers who suffered from plumbism during the year 1900 was 17, eight less than the number affected during the preceding year. Of those affected 10 were compositors, four were linotypists, two were stereotypers, one was a tyre rubber, and a case also occurred in a man employed in sweeping up the filings which dropped from a linotype machine. The medical inspector deprecates "the pernicious habit which many compositors have of holding the type between their teeth." It is certainly a dangerous habit and we may hope that it is not a common one amongst a most intelligent class of men.

The incidence of cases of poisoning amongst workers in white lead shows only a slight decrease, and periodical medical examination is said to be ineffective as a means of producing improvement partly because of (1) the low stratum of society from which the workers are drawn, and partly because (2) the threat of suspension is not so deterrent as in other branches of industry in which lead is employed. White lead workers are often a casual shifting race, whereas the skilled work employed in the Potteries is a well-paid profession not lightly to be given up.

A considerable improvement has been recently brought about in the earthenware and china industries. The number of cases of lead-poisoning reported in the year 1899 was 249, in the year 1900 it was 200. The statistics for the latter year show that the total number of people employed in the process of dipping amounted to 2265, and the number of those engaged in other branches of the work to 6372. Of the dippers 123, a proportion of 5·4 per cent., were affected by lead-poisoning. Of the other workers 200 were affected, a proportion of 3·1 per cent. These figures compare favourably with those of the previous year to the extent of 0·1 per cent. and 0·8 per cent. respectively. The principal improvement has taken place amongst the more skilled workers—the majolica-painters, the colour-dusters, and the glost-placers. The change for the better is seen throughout the whole of the districts engaged in the manufacture. A separate return is given showing for the Potteries district the number of persons employed in the different works and the number of cases of lead-poisoning reported to have occurred amongst them. In this list it is seen that in the case of majolica-painters the incidence of plumbism has been reduced from 4·7 per cent. in the year 1899 to 0·9 per cent. in 1900. The number of these skilled artizans is, however, small; it amounts only to 425, all of whom are women. The total number of people employed in this district in the various branches of the trade is 4857, and of these 165 suffered from plumbism, a proportion of 3·4 per cent., an improvement of 1 per cent. on the returns of the previous year.

Mr. J. F. Arlidge has made a series of inquiries to determine the effects of lead on pregnancies. He found that 239 women before they were engaged in working in lead bore 453 children, of whom 183 died. The total number of pregnancies was 487 and the number of miscarriages was 34. At the time during which they worked and after they had ceased to work in lead these women bore 499 children, of whom 182 died; the total number of pregnancies was 566 and the number of miscarriages was 67.

It is pleasant to be able to record the fact that a leadless glaze is coming into general use for the enamelling of iron hollow-ware, and that the number of glass-cutters who suffered from plumbism during the year 1900 was markedly less than that of those who suffered from it during the previous year (the exact numbers are seven and 19 respectively). On the other hand, the number of cases occurring amongst the manufacturers of electric accumulators is one in excess of that reported in the year 1899. Amongst those who work in the preparation of paints and colours the incidence of lead-poisoning is still severe. 30 factories are used for the work and over 82 per cent. of the cases occurred in those engaged in grinding and mixing pigments. Coach-builders also still suffer greatly from plumbism. 34 cases occurred amongst railway employés, and of these 19 occurred amongst the men of a large company on whose premises "the facilities for washing were bad." In making this statement it is reasonable to assume that the medical inspector desired to convey the idea that facilities for washing were absent or insufficient. In calico works it is stated that aniline dyes are taking the place of chromate of lead. A list of the fatal cases of lead-poisoning is given, but the enumeration of the symptoms from which the patients suffered is not sufficiently complete to make it of any clinical value.

ELECTION OF DIRECT REPRESENTATIVES: CANDIDATURE OF DR. GLOVER.

A MEETING in support of the candidature of Dr. J. G. Glover was held on Oct. 4th at 1, Highbury-place, London, N. The chair was taken by Dr. G. Danford Thomas, who in his opening remarks urged the claims of Dr. Glover for re-election to the General Medical Council.

Dr. GLOVER said:—The importance of this meeting will turn rather upon what my constituents say than on what I say. But I must do my part in asking you to renew your support at another election. The General Medical Council is one of the best abused bodies in the profession. And it is all the better for a little criticism. If the critics are censorious and unreasonable it is they who suffer rather than the General Medical Council. As to my own claim to represent you, if you are not convinced of it by this time hardly anything I can say will convince you. But I trust that after hearing me you will see your way to that expression of confidence which has always served me in the past. It is in the very nature of the case that I must speak somewhat egotistically. I have to justify my existence. You will forgive any appearance of vanity. First, I should not be worthy to be a Direct Representative if I did not try to make medical education better. I believe that in its soundness and efficiency the great strength of the profession lies. Within a year or two of my election I tried to show the Council that there were gaps in medical education and that there were great groups of diseases not much seen by the student and in which he was not examined: that hospital practice was not general practice. In this I was fully supported by my then colleagues the Direct Representatives. The Council, and especially its leading members, gave us a fair hearing. We succeeded in getting the Government to throw the Metropolitan Asylums Board open to medical students. We secured, what I fear has been little acted on, the recognition of pupilage to a medical practitioner. Sir James Paget wrote to me on my views and said, "I see what you will do: you will add another year to medical education." That year, of course, has been added and the Direct Representatives have a full share of the responsibility and, as I think, the credit of the change. I said to a medical student a few months ago, "You are at the stage of your education described as walking the hospital." He replied, "I am walking five hospitals," and he made

good his statement by showing that besides his own hospital he was studying fevers at one hospital and insanity at another and that his tutor was very good in giving him clinical instruction at one or two hospitals to which he was attached. There are other questions which I must not pass over. There is the midwives question. I shall say a few words about it. I think it is a less burning question than it was in the last two elections, chiefly because I think that everybody sees that it must be settled. I do not myself care how simple the machinery is by which the new midwife is to be governed, nor do I care how simple her training is. I told the General Medical Council once, and I repeat, that if we could only secure that all midwives should know the value of clean hands and of puerperal cleanliness generally we should immensely reduce the mortality of lying-in women attended by them. If in addition to this we could secure—as they do in every respectable maternity charity—that the women are to be made to understand the limits of their own functions and the obligation resting on them to send for a registered medical practitioner whenever the case of the mother or child presents any unusual features, we should have done nothing to impair the authority and the place of midwifery as a most important branch of medicine and we should have helped in a movement to increase the safety of lying-in women in childbirth. I have no objection to call this new midwife a "midwifery nurse," though I think the Legislature would insist on the old word. A "nurse midwife" would be the best title, for it would indicate what is the fact—that the poor woman for whom alone this legislation is meant and for whom alone it can be justified, needs a nurse as well as a midwife. I wish to emphasise two points in my personal view of this question. First, that a Midwives Bill will be of little use if it does not stop the *practice* of midwifery by all women not certified or licensed. Until the last Bill it was only attempted to prevent the use of the *title* "midwife." That, in my opinion, would be useless for the same class of women that make the Sarah Gamps would continue to exist and to attend the cases without calling themselves midwives. The next point on which I feel strongly is that it should be a part of this legislation for every district to provide and to pay registered medical men to respond to the call of the midwife. If it is fit for the State to provide gratuitous vaccination for the children of the poor it is surely equally reasonable to provide medical help for the mother in the hour of her peril. I succeeded in the Midwives Committee of the General Medical Council in getting this view adopted. But I did not succeed in getting the Council to accept it and undoubtedly the House of Commons will think twice, especially at the present time, before passing a clause which involves any addition to rates or taxes, however slight. But this is a very special case and one that should appeal to all parties. I must not spend more time on the midwives question. I should not have spent so much but for its human importance and the way in which it takes up the time and money of the Council. It would not be an exaggerated estimate to say that first and last our discussions on this subject have cost £1500 or £2000. We had one special session which cost between £600 and £700 to consider a Midwives Bill. The proposal for the creation of a Conciliation Board for the adjustment of disputes between medical aid associations composed chiefly of friendly societies and the medical profession has had, and if I am elected again will have, my warm support. Such a board must be formed outside of the Council; but it cannot be doubted that the support of the proposal by the Council and the great personal interest of the President, Sir William Turner, have greatly facilitated the realisation of such a proposal. The dispute between the Royal College of Surgeons of England and the Royal College of Physicians of London on the one hand, and the General Medical Council on the other, is an unhappy one, and one that the best friends of the General Medical Council will try to bring to a termination within the Council itself, and soon. I hold no brief for the Royal Colleges. I have always been surprised that the Royal College of Surgeons of England did not concede the reasonable degree of direct representation asked for by its members of whom it might well be proud. Such a refusal seems to me unreasonable and impolitic. But the matter under dispute at present between the Colleges and the Council is one that can only be settled amicably. Our own lawyers tell us that we have not the power to compel the Colleges to submit to our approval the institutions whose teaching in science they accept. The Colleges justly say that they carefully inspect the institutions. We do not pretend that we have any means of doing so. It is not denied that in many of them chemistry, physics, and biology are well taught. My desire and endeavour will be to preserve or to restore the good understanding which has hitherto prevailed between the Colleges and the Council. Gentlemen, perhaps you will ask me what is the position and outlook of direct representation, and my reply shall be short. I see little immediate chance of any large increase of it. Parliament is terribly preoccupied with the war, and if once the war were ended there are other questions that would seriously compete with the demand for any amendment of the Medical Acts. But if we use direct representation well, and if the profession itself exercises the franchise already conceded to it, we may reasonably hope that the principle will be extended. There are various views entertained of the work and merit of the General Medical Council; according to some it has no merit, according to others it is a serious and powerful body. Be this as it may, it combines all medical authorities in its conferences and the Direct Representatives as well. So that meantime we do well to make much of it. It has improved education. It has raised the tone of professional ethics and of medical practice. It has abolished the unqualified assistant and by so much has enhanced the value of qualification. It has improved the feeling existing between the individual bodies and increased their mutual respect. By direct representation it supplies a link between the medical authorities and the General Medical Council. In all those ways it has benefited the public. For all these reasons the profession does well to regard it with respect and interest. I must be excused one personal word in closing. I do not know what the issue of the election will be. As regards myself I am struck with the attitude of confidence and kindness towards me throughout the profession and even including many who do not agree with me on all points. For one thing, whatever happens, I shall always have to be grateful—and that is the help and support of my neighbours. A man who has not this encouragement has little right to expect success. I have never lacked this support and I never had more evidences of it than I have had on this occasion.

Sir THOMAS BARLOW said that he attended the meeting with considerable diffidence and because he knew that it was to be a friendly meeting of fellow practitioners for the sake of conference and in order to learn something about the important questions that concerned the General Medical Council. The reason why so many people shirked medical politics was because they did not feel any direct concern in them. Men thought that the General Medical Council did not affect them, and having their own work to do said medical politics were no concern of theirs. But that was a very unworthy attitude to take up, for whatever concerned the humblest member of their profession concerned them all. There was a Nemesis that would come to them if they put aside the claims of their fellow practitioners. The manly and English thing to do was to take the trouble and pains to find out about these questions. There was a right and a wrong way, and they should try to carry the best man through to the General Medical Council and have things properly considered. If they did not address themselves to these questions and get to the bottom of them they would be taken out of their hands either by the Government or by the public, and both of these results would be a misfortune and a calamity. In regard to the midwives question was it not a scandal that it had lain so long on the table unsettled? Practical politicians recognised that there was a crying need calling for legislation to protect poor folks. If the profession kept the line that they had taken on this midwives question (for they were all in the same boat) it was a line of conduct rather like that of the dog in the manger. No impartial person who had listened to Dr. Glover could resist the conviction that the method that he and others had adopted was a sane method that brought the matter into practical politics. He considered that the midwives ought not to attempt any operative midwifery as that would be abominable. The midwives ought to have the power to call in some well-qualified practitioner to back them up in difficult cases. They ought to strengthen the General Medical Council and its members, especially those who took a practical, sane view. In regard to the friendly aid societies, however much they might dislike the conditions some line of action must be taken or the profession would be degraded. It was easy to sneer at the General Medical Council,

but anybody could sneer. What they wanted was someone to watch and to see the trend of public opinion. It was marvellous how rapidly social changes took place, and the position of their poorer brethren might be undermined in many ways right and left unless there were those who were on the *qui vive* and determined to defend them. They ought to make up their mind to secure the election of a good man to the Council, and he felt anxious that Dr. Glover should be elected because in choosing Direct Representatives they must have a man who knew what the life of a general practitioner was and who knew it in different ways. Further, they wanted a man who would not approach the question in any spirit of trade unionism. The great thing was to have these matters dealt with in the interests of the public because the interests of the profession were the interests of the public, and if the right thing were done for the public that would in the long run be right for the profession. Many of them perhaps did not agree with Dr. Glover in every line that he took, but he (Sir Thomas Barlow) was convinced that when Dr. Glover spoke on behalf of their craft he always bore in mind not only their interest but also the public interest. He did not think that any impartial person could have listened to the statement of Dr. Glover without recognising the tone of moderation, of practical politics, and of medical common-sense, that commended itself to the thoughtful practitioner. They wanted a Direct Representative who was alive to the danger of aimless and useless talk, and they wanted someone who recognised that the General Medical Council had limitations and could not do everything. Referring to Dr. Glover's remarks about the cost of talking on medical business at the General Medical Council, he said that it showed that Dr. Glover was alive to the great waste of money and that he wanted to work at something that was practical and within reasonable limits. Dr. Glover was well known to be practical, sensible, and moderate, and would not waste time or words, and for those reasons he had particular pleasure in proposing the following motion :—

That this meeting, having heard from Dr. Glover a statement of the work of the General Medical Council and of his views thereon, and having regard to his action in the three periods during which he has been one of the Direct Representatives of the profession in the Council, hereby expresses its unabated confidence in him and its determination to do all in its power to ensure his successful re-election.

Dr. J. FORD ANDERSON, in seconding the motion, said that the large number of practitioners who failed to vote at the election implied an appalling want of public spirit.

Dr. A. G. BATEMAN, in supporting the motion, said that owing to his peculiar official position he had particular reason for knowing Dr. Glover and his work. Dr. Glover was not a man of fancies or fads and was not easily biased by outside opinion. He would pay attention to what was said and would bring any matter before the General Medical Council if he thought it right to do so and would explain it to the Council with great tact and experience. With regard to the procedure of the General Medical Council he urged that by a new Medical Act the Council should have power to subpœna witnesses and should be empowered to administer the oath.

The motion was then put and was carried unanimously.

Dr. F. J. BUCKELL proposed, Mr. T. JAGO seconded, and Dr. W. A. MALCOLM supported the following motion, which was carried unanimously :—

That this meeting, believing that Dr. Glover's re-election will be in the interest of the profession generally as well as in that of the principle of direct representation, desires to commend his candidature to the heartiest support of all registered medical practitioners in England and Wales, who, it is hoped, will in their own interest, as well as that of the public, record a much larger vote at the coming election than on any previous occasion.

Dr. A. REID announced that promises of support had been received from the following, amongst others : Dr. James Adams, Eastbourne ; Dr. F. H. Alderson, Bournemouth, formerly of London ; Mrs. Garrett Anderson, London ; Dr. Robert Barnes, consulting physician to St. George's Hospital ; Mr. L. G. Barritt, Spalding ; Dr. R. W. Batten, Gloucester ; Mr. G. H. Biden, Penrith ; Mr. C. W. Biden, Framlingham, Suffolk ; Dr. G. H. Bishop, Wimbledon ; Dr. J. Gordon Black, Harrogate ; Dr. F. Milnes Blumer, Stafford ; Mr. W. Percy Blumer, Sunderland ; Mr. C. Braine-Hartnell, Stroud ; Dr. J. W. Bramwell, Cheltenham ; Mr. Edward Buckell, Romsey, Hants ; Mr. J. L. Crisp, South Shields ; Dr. George Easter, London ; Mr. Hilton Fagge, Melton Mowbray ; Dr. Joseph Frain, Newcastle-on-Tyne ; Dr. R. Ritchie Giddings, Nottingham ; Dr. J. Gill, Clifton ; Mr. A. Pearce Gould, London ; Dr. Groves, Newport, Isle of Wight ; Dr. James Hardie, Manchester ; Dr. F. de Havilland Hall, London ; Dr. T. F. Higgs, Dudley ; Dr. A. Hollis, Freshwater ; Dr. G. Petgrave Johnson, Stoke-on-Trent ; Mr. H. W. Kendall, Clifton ; Mr. G. Longbotham, Middlesboro' ; Dr. Stephen Mackenzie, London ; Dr. James Murphy, Sunderland ; Dr. William Murray, Newcastle-on-Tyne ; Dr. George R. Murray, Newcastle-on-Tyne ; Dr. Frederick Page, Newcastle-on-Tyne ; Dr. R. Paramore, London ; Dr. Robert Peart, North Shields ; Dr. Lloyd Roberts, Manchester ; Mr. Thomas Rushbrooke, London ; Dr. E. Markham Skerritt, Clifton ; Mr. Rudolph Smith, Stockton-on-Tees ; Dr. Smith, Newport, Essex ; Dr. E. Mansel Sympson, Lincoln ; Mr. B. Thornton, Margate ; Mr. A. Primrose Wells, Beckenham ; Dr. R. M. Witham, Burnley ; Dr. James S. Williamson, Ventnor, and Mr. E. M Wrench, Baslow.

The following gentlemen were constituted a general committee for the promotion of the candidature of Dr. J. G. Glover as a Direct Representative : Dr. W. Danford Thomas, Mr. W. H. Kesteven, Dr. J. A. Glover, Dr. C. A. Ironside, Dr. A. Reid, Mr. G. F. Pollard, Mr. G. T. Keele, Dr. T. Hamilton, Sir Thomas Barlow, Dr. R. Paramore, Dr. A. G. Bateman, Dr. F. J. Buckell, Dr. Tice F. Budden, Dr. R. Hingston Fox, Mr. Thomas Jago, Mr. T. D. Jago, Dr. Alexander Morison, Mr. T. Hobbs Crampton, Dr. W. A. Malcolm, Dr. Ford Anderson, Mr. R. C. M. Pooley, Dr. Peter Harper, and Dr. Michael J. Bulger.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In 33 of the largest English towns 6378 births and 3435 deaths were registered during the week ending Oct. 5th. The annual rate of mortality in these towns, which had declined from 21·6 to 16·7 per 1000 in the six preceding weeks, further decreased last week to 15·6. In London the death-rate was 14·7 per 1000, while it averaged 16·2 in the 32 large provincial towns. The lowest death-rates in these towns were 10·8 in Bradford, 11·0 in Huddersfield, 11·3 in Derby, and 12·0 in Cardiff; the highest rates were 19·8 in Gateshead, 20·0 in Liverpool, 21·3 in Newcastle, and 23·1 in Sunderland. The 3435 deaths in these towns last week included 526 which were referred to the principal zymotic diseases, against 970, 732, and 634 in the three preceding weeks ; of these 526 deaths 281 resulted from diarrhœal diseases, 74 from diphtheria, 59 from "fever" (principally enteric), 41 from measles, 38 from scarlet fever, 30 from whooping-cough, and three from small-pox. The lowest death-rates from these diseases last week were recorded in Portsmouth, Cardiff, Swansea, Derby, and Huddersfield ; and the highest rates in West Ham, Salford, Leeds, Sunderland, and Gateshead. The greatest proportional mortality from measles occurred in West Ham and in Wolverhampton ; from scarlet fever in Preston ; from whooping-cough in Plymouth and in Newcastle ; and from diarrhœal diseases in West Ham, Leicester, Salford, Burnley, and Gateshead. The 74 deaths from diphtheria in the 33 large towns included 30 in London, eight in West Ham, eight in Liverpool, five in Brighton, five in Hull, and four in Bristol. Three fatal cases of small-pox occurred in London, but not one in any other of the 33 large towns. There were 169 small-pox patients under treatment in the Metropolitan Asylums hospitals on Saturday, Oct. 5th, against numbers increasing from 13 to 163 on the seven preceding Saturdays ; 51 new cases were admitted during the week, against 62, 37, and 44 in the three preceding weeks. The number of scarlet fever patients in these hospitals and in the London Fever Hospital, which had risen from 2994 to 3151 at the end of the four preceding weeks, had further increased to 3157 on Saturday last ; 426 new cases were admitted during the week, against 457, 427, and 460 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 116, 124, and 137 in the three preceding weeks, declined again last week to 132, and were 72 below the corrected average. The causes of 41, or 1·2 per cent., of the deaths in the 33 towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in West Ham, Nottingham, Salford, Bradford,

Leeds, and in 14 other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham-Liverpool, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had decreased from 17·8 to 16·0 per 1000 in the four preceding weeks, further declined to 14·5 per 1000 during the week ending Oct. 5th, and was 1·1 below the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 9·1 in Greenock and 9·4 in Leith to 16·2 in Aberdeen and 16·4 in Dundee. The 463 deaths in these towns included 42 which were referred to diarrhœa, 14 to measles, seven to scarlet fever, seven to whooping-cough, six to diphtheria, and six to "fever." In all, 82 deaths resulted from these principal zymotic diseases last week, against 83 and 73 in the two preceding weeks. These 82 deaths were equal to an annual rate of 2·6 per 1000, which was 0·2 above the mean death-rate last week from the same diseases in the 33 large English towns. The fatal cases of diarrhœa, which had been 53 and 42 in the two preceding weeks, were again 42 last week, and included 16 in Glasgow, nine in Dundee, seven in Aberdeen, four in Greenock, three in Paisley, and three in Leith. The deaths from measles, which had been five and 12 in the two preceding weeks, further increased last week to 14, of which 12 were recorded in Glasgow. The deaths from scarlet fever, which had been three, two, and four in the three preceding weeks, rose to seven last week, and included five in Glasgow. The fatal cases of whooping-cough, which had been 13 and seven in the two preceding weeks, were again seven last week, and included five in Glasgow and two in Edinburgh. The deaths from diphtheria, which had been three, four, and one in the three preceding weeks, increased again last week to six, of which three were registered in Glasgow and three in Edinburgh. The fatal cases of "fever," which had been 12, six, and seven in the three preceding weeks, declined again to six last week, and included three in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 79, 81, and 101 in the three preceding weeks, declined again last week to 77, and were 21 below the number in the corresponding period of last year. The causes of 19, or more than 4 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 23·4 and 17·8 per 1000 in the two preceding weeks, rose again to 19·9 during the week ending Oct. 5th. During the past four weeks the death-rate has averaged 20·8 per 1000, the rates during the same period being 15·3 in London and 15·6 in Edinburgh. The 143 deaths of persons belonging to Dublin registered during the week under notice showed an excess of 15 over the number in the preceding week, and included 20 which were referred to the principal zymotic diseases, against 25, 30, and 17 in the three preceding weeks; of these, nine resulted from diarrhœa, eight from "fever," two from whooping-cough, and one from diphtheria. These 20 deaths were equal to an annual rate of 2·6 per 1000, the zymotic death-rates during the same period being 1·9 in London and 1·1 in Edinburgh. The fatal cases of diarrhœa, which had been 22, 20, and 11 in the three preceding weeks, further declined last week to nine. The deaths referred to different forms of "fever," which had been two, three, and three in the three preceding weeks, increased to eight last week. The 143 deaths in Dublin last week included 31 of children under one year of age and 37 of persons aged upwards of 60 years; the deaths both of infants and of elderly persons showed a slight increase over the respective numbers recorded in the preceding week. Three inquest cases and two deaths from violence were registered; and 40, or nearly one-third, of the deaths occurred in public institutions. The causes of 12, or more than 8 per cent., of the deaths in Dublin last week were not certified.

VITAL STATISTICS OF LONDON DURING SEPTEMBER, 1901.

In the accompanying table will be found summarised complete statistics relating to sickness and mortality in each of the cities and boroughs in the county of London. With regard to the notified cases of infectious diseases it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to an annual rate of 12·4 per 1000 of the population, provisionally estimated at 4,543,757 persons in the middle of the year. In the three preceding months the rates had been 8·5, 9·6, and 8·6 per 1000 respectively. The rates were considerably below the average in Kensington, Hammersmith, Chelsea, the City of Westminster, Wandsworth, and Woolwich; while they showed the largest excess in St. Pancras, Hackney, Finsbury, Southwark, Bermondsey, and Deptford. During the four weeks ending Sept. 28th, 157 cases of small-pox were notified in London, against 4, 22, and 94 in the three preceding months; 52 cases belonged to St. Pancras, 22 to St. Marylebone, 13 to Holborn, 12 to Finsbury, and 10 to Islington. The number of small-pox patients under treatment in the Metropolitan Asylums hospitals at the end of September was 163, against 5, 13, and 74 at the end of the three preceding months; 174 new cases were admitted during the month, against 5, 19, and 93 in the three preceding months. The prevalence of scarlet fever showed a considerable increase over that recorded in recent months; among the various metropolitan boroughs this disease was proportionally most prevalent in St. Pancras, Hackney, Bethnal Green, Southwark, Bermondsey, Camberwell, and Greenwich. The Metropolitan Asylums hospitals contained 3096 scarlet fever patients at the end of September, against 2752, 3026, and 2971 at the end of the three preceding months; the weekly admissions averaged 412 last month, against 343, 355, and 288 in the three preceding months. The prevalence of diphtheria showed a marked increase over that recorded in the preceding month; the greatest proportional prevalence of this disease was recorded in Fulham, St. Pancras, Hackney, Holborn, Finsbury, and Deptford. There were 1499 diphtheria patients under treatment in the Metropolitan Asylums hospitals at the end of September, against 1169, 1332, and 1336 at the end of the three preceding months; the weekly admissions averaged 248, against 175, 209, and 177 in the three preceding months. The prevalence of enteric fever was greatly in excess of that shown in any recent month; among the various metropolitan boroughs this disease was proportionally most prevalent in Fulham, Hackney, Shoreditch, Stepney, Poplar, and Deptford. The number of enteric fever patients under treatment in the Metropolitan Asylums hospitals, which had been 125, 166, and 225 at the end of the three preceding months, had further risen to 292 at the end of September; the weekly admissions averaged 50, against 25, 29, and 42 in the three preceding months. Erysipelas was proportionally most prevalent in Paddington, St. Pancras, Hackney, Finsbury, Stepney, Southwark, and Deptford. The 19 cases of puerperal fever included three in Islington, three in Lambeth, three in Wandsworth, two in Paddington, and two in Hackney.

The mortality statistics in the table relate to the deaths of persons actually belonging to the various metropolitan boroughs, the deaths occurring in the public institutions of London having been distributed among the various metropolitan boroughs in which the deceased persons had previously resided. During the four weeks ending Sept. 28th the deaths of 5381 persons were registered, equal to an annual rate of 15·4 per 1000, against 13·4, 16·1, and 18·5 per 1000 in the three preceding months. The lowest death-rates in the various metropolitan boroughs were 8·6 in Hampstead, 10·6 in Paddington, 12·0 in Kensington, 12·2 in Stoke Newington, 12·9 in the City of Westminster and in Woolwich, and 13·3 in Islington; the highest rates were 19·1 in Finsbury and in Stepney, 19·2 in Holborn, 19·3 in Poplar, 20·2 in Shoreditch, and 20·7 in Bethnal Green. During the four weeks of September 1047 deaths were referred to the principal zymotic diseases; of these, 24 resulted from small-pox, 58 from measles, 49 from scarlet fever, 109 from diphtheria, 62 from whooping-cough, 62 from enteric fever, and 683 from diarrhœal diseases. The lowest death-rates from these diseases occurred last month in Kensington, Chelsea, City of Westminster, St. Marylebone, Hampstead, Wandsworth, and Woolwich; and the highest rates in Finsbury, Shoreditch, Southwark, Bermondsey, Greenwich, and Lewisham. The 24 fatal cases of small-pox largely exceeded the average and included 17 in St. Pancras, two in St. Marylebone, and one each in Hampstead, Islington, Stoke Newington, Hackney, and Southwark. The 58 deaths from measles showed a considerable decline from the average

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING SEPTEMBER, 1901.

(Specially compiled for THE LANCET.)

CITIES AND BOROUGHS.	Estimated population in the middle of 1901.	NOTIFIED CASES OF INFECTIOUS DISEASE.										DEATHS FROM PRINCIPAL INFECTIOUS DISEASES.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of Infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.*	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœal diseases.	Total.	Annual rate per 1000 persons living.			
LONDON	4,543,757	157	1971	1292	1	453	6	19	431	1	4331	12·4	24	58	49	109	62	—	62	—	683	1047	3·0	5381	15·4	168
West Districts.																										
Paddington	144,154	2	64	25	—	12	—	2	17	—	122	11·0	—	—	1	4	1	—	2	—	21	29	2·6	117	10·6	129
Kensington	176,787	4	46	24	—	12	1	1	9	—	97	7·2	—	1	1	1	2	—	—	—	12	17	1·3	163	12·0	154
Hammersmith	112,619	1	37	10	—	5	—	—	8	—	61	7·1	—	—	—	2	2	—	—	—	21	25	2·9	151	17·5	208
Fulham	138,426	—	59	69	—	19	1	—	7	1	156	14·7	—	—	1	3	3	—	3	—	24	34	3·2	142	13·4	153
Chelsea	73,879	1	16	7	—	5	—	—	1	—	30	5·3	—	—	1	—	—	—	2	—	2	5	0·9	79	13·9	103
City of Westminster	182,502	5	43	28	—	7	1	—	13	—	97	6·9	—	1	1	3	1	—	3	—	10	19	1·4	181	12·9	137
North Districts.																										
St. Marylebone	133,060	22	46	21	—	5	—	—	15	—	109	10·7	2	—	1	4	—	—	1	—	14	22	2·2	152	14·9	83
Hampstead	82,287	2	27	14	—	9	—	1	5	—	58	9·2	1	—	—	1	2	—	1	—	6	11	1·7	54	8·6	122
St. Pancras	235,297	52	114	129	—	29	—	1	29	—	354	19·6	17	2	2	8	3	—	2	—	23	57	3·2	312	17·3	156
Islington	335,325	10	157	125	—	37	1	3	29	—	362	14·1	1	5	6	13	3	—	6	—	32	66	2·6	342	13·3	124
Stoke Newington	51,328	5	11	11	—	5	—	—	4	—	36	9·1	1	—	1	1	—	—	1	—	5	9	2·3	48	12·2	104
Hackney	219,780	6	107	105	—	38	—	2	35	—	293	17·4	1	5	2	11	2	—	3	—	26	50	3·0	260	15·4	177
Central Districts.																										
Holborn	59,205	13	25	27	1	1	—	—	5	—	72	15·9	—	1	—	2	—	—	1	—	10	14	3·1	87	19·2	162
Finsbury	101,243	12	45	43	—	7	—	—	19	—	126	16·2	—	4	—	3	2	—	2	—	23	34	4·4	148	19·1	153
City of London	26,627	2	8	11	—	3	—	—	—	—	24	11·7	—	—	—	1	—	—	1	—	3	5	2·4	35	17·1	204
East Districts.																										
Shoreditch	118,554	2	45	37	—	17	1	1	6	—	109	12·0	—	7	—	2	1	—	3	—	24	37	4·1	184	20·2	219
Bethnal Green	129,700	2	84	35	—	13	—	—	15	—	149	15·0	—	5	3	4	—	—	2	—	24	38	3·8	206	20·7	191
Stepney	236,584	4	138	69	—	49	—	—	43	—	323	14·1	—	3	4	7	9	—	6	—	57	86	3·8	438	19·1	205
Poplar	168,827	2	57	64	—	29	—	—	18	—	170	13·1	—	3	—	7	2	—	2	—	36	50	3·9	260	19·3	200
South Districts.																										
Southwark	206,219	4	161	74	—	22	—	1	31	—	293	18·5	1	6	5	8	3	—	2	—	39	64	4·0	294	18·6	191
Bermondsey	130,348	—	128	33	—	15	—	—	13	—	189	18·9	—	—	1	3	2	—	4	—	33	43	4·3	181	18·1	170
Lambeth	302,460	3	138	53	—	17	—	3	20	—	234	10·1	—	3	4	4	4	—	3	—	50	68	2·9	345	14·3	170
Battersea	169,364	—	67	23	—	11	—	1	7	—	109	8·4	—	7	2	3	3	—	—	—	23	38	2·9	181	13·9	161
Wandsworth	233,943	1	51	37	—	10	—	3	19	—	121	6·7	—	3	3	1	2	—	1	—	29	39	2·2	248	13·8	157
Camberwell	259,897	—	136	63	—	29	—	—	23	—	251	12·6	—	—	7	5	9	—	5	—	49	75	3·8	282	14·1	197
Deptford	110,732	—	44	62	—	14	1	—	16	—	137	16·1	—	—	2	2	2	—	—	—	19	25	2·9	137	16·1	155
Greenwich	96,188	—	51	33	—	8	—	—	9	—	101	13·7	—	1	—	5	—	—	3	—	21	30	4·1	111	15·0	191
Lewisham	128,423	1	36	25	—	8	—	—	9	—	79	8·0	—	1	1	1	4	—	3	—	30	40	4·1	137	13·9	238
Woolwich	117,619	1	30	15	—	12	—	—	6	—	64	7·1	—	—	—	—	—	—	—	—	17	17	1·9	116	12·9	159
Port of London	—	—	—	—	—	5	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Including membranous croup.

number in the corresponding periods of the 10 preceding years; among the various metropolitan boroughs this disease was proportionally most fatal in Hackney, Finsbury, Shoreditch, Bethnal Green, Southwark, and Battersea. The 49 fatal cases of scarlet fever were 19 below the average; the greatest proportional fatality from this disease occurred in Islington, Bethnal Green, Southwark, Camberwell, and Deptford. The 109 deaths from diphtheria showed a decline of 68 from the average number in the corresponding periods of the 10 preceding years; this disease showed the highest proportional fatality in St. Pancras, Islington, Hackney, Poplar, Southwark, and Greenwich. The 62 fatal cases of whooping-cough were 56 below the corrected average number; among the various metropolitan boroughs this disease was proportionally most fatal in Fulham, Stepney, Camberwell, Greenwich, and Lewisham. The 62 deaths referred to "fever" corresponded with the average number in the corresponding periods of the 10 preceding years; the highest "fever" death-rates occurred in Fulham, Chelsea, Shoreditch, Bermondsey, Greenwich, and Lewisham. The 683 deaths from diarrhœal diseases were 134 in excess of the corrected average number; the proportional mortality from these diseases was highest in Finsbury, Shoreditch, Poplar, Bermondsey, Greenwich, and Lewisham. In conclusion, it may be stated that the aggregate mortality from these principal zymotic diseases in London during September almost corresponded with the average.

Infant mortality in London last month, measured by the proportion of deaths of children under one year of age to registered births, was equal to 168 per 1000. The lowest rates of infant mortality were recorded in Chelsea, City of Westminster, St. Marylebone, Stoke Newington, Hampstead, and Islington; and the highest rates in Hammersmith, City of London, Shoreditch, Stepney, Poplar, and Lewisham.

THE SERVICES.

IMPERIAL YEOMANRY.

IN addition to the list of South African War Honours published in THE LANCET of Oct. 5th the following names should be noted:—

To be Companions of the Distinguished Service Order: Captain Percival Davidson, Medical Officer, 5th Battalion; Captain W. J. Naismith, Medical Officer, 6th Battalion; and Captain Ernest Hopkinson, Medical Officer, 15th Battalion.

ARMY NURSING SERVICE.

To have the Decoration of the Royal Red Cross: Superintendents Miss M. Thomas, Miss S. J. Browne, Miss E. A. Dowse, Miss S. E. Webb, Miss S. E. Oram, and Miss A. Garriock; Nursing Sisters and Acting Superintendents Miss L. W. Tulloh and Miss L. M. Stewart; and Nursing Sisters Miss E. T. Noble, Miss A. S. Bond, Miss J. Hoadley, Miss M. G. Hill, Miss E. Nixon (New South Wales), Miss A. Bidsmead (South Australia), and Miss J. M. N. Williamson (New Zealand).

ARMY NURSING SERVICE RESERVE.

To have the Decoration of the Royal Red Cross: Nursing Sisters Miss J. E. Skillman, Miss A. B. Smith, Miss A. B. Trew, Miss E. H. Beecher, Miss A. Knaggs, Miss J. Southwell, Miss E. M'Call Anderson, Miss E. M. M'Carthy, and Miss M. E. Greenham.

ROYAL NAVY MEDICAL SERVICE.

Fleet Surgeon John Lyon has been placed on the retired list at his own request, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets. Dated Sept. 14th, 1901.

The undermentioned Fleet Surgeons have been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets:—Michael FitzGerald, C.M.G. (dated Sept. 1st, 1901), and Robert Bentham (dated Sept. 2nd, 1901).

The undermentioned qualified candidate for the Naval Medical Service has been appointed to be Surgeon in His Majesty's Fleet:—Pierce Leslie Crosbie.

The following appointments are announced:—Deputy Inspector-General T. D. Gimlette to Plymouth Hospital. Fleet Surgeons: C. W. Buchanan-Hamilton to the *St. Vincent* and E. W. Luther to the *Prince George*. Staff Surgeons: H. Meikle to the *Indefatigable;* J. Andrews to the *Prince George;* W. Bett to the *Minerva;* P. V. Jackson to the *President* for a three months' course of hospital study; W. G. K. Barnes to the *Briton* and E. R. Dimsey, D.S.O., to the *Resolution* and to the *Formidable* on commissioning; and A. Maclean to the *Pembroke* for a three months' course of hospital study. Surgeons: P. L. Crosbie to the *Duke of Wellington* for Haslar Hospital; W. B. Maurice to the *Colossus;* and R. W. Stanistreet to the *Trafalgar*.

ROYAL ARMY MEDICAL CORPS.

Lieutenant-Colonel T. F. MacNeece has been transferred to the medical charge of the Station Hospital at Nowshera. Captain C. Dalton, invalided home from South Africa after being dangerously wounded, has gone to Sierra Leone at his own request for a second tour of service in West Africa and has been posted to the Station Hospital, Tower Hill. Lieutenant M. G. Stirling is posted to the Depôt, Aldershot. Lieutenant S. Mason has embarked for South Africa. Lieutenant-Colonel H. H. Stokes, Senior Medical Officer at the Curragh, will, on retirement, be retained in his present post as a retired officer temporarily employed. Captain Mansfield assumes medical charge of the Royal Field Artillery, Mounted Infantry, Royal Engineers, District Staff, and details, Marlborough Lines, Aldershot. Lieutenant J. H. McGregor has embarked for Barbados.

INDIAN MEDICAL SERVICE.

Lieutenant-Colonel William Allason Simmonds, Bengal Establishment, and Lieutenant-Colonel Charles Adams-Madras Establishment, have been transferred to the half, pay list.

VOLUNTEER CORPS.

Rifle: 1st Volunteer Battalion the Queen's (Royal West Surrey Regiment): Surgeon-Lieutenant J. Wayte to be Surgeon-Captain. 4th (Perthshire) Volunteer Battalion the Black Watch (Royal Highlanders): Surgeon-Captain C. W Howatson resigns his commission.

VOLUNTEER MEDICAL STAFF CORPS.

The Glasgow Companies:—Surgeon-Lieutenant-Colonel Bruce Goff, retired, late 2nd Volunteer Battalion Scottish Rifles, to be Honorary Surgeon-Colonel on appointment as Honorary Commandant. Surgeon-Lieutenant R. T. Halliday to be Surgeon-Captain; John Wright to be Surgeon-Lieutenant.

SOUTH AFRICAN WAR NOTES.

The following have been discharged from hospital to duty:—Lieutenant F. Ashe, R.A.M.C., Major M. Kelly, R.A.M.C., and Lieutenant W. H. Odlum, R.A.M.C.

Civil Surgeons C. L. Dunne, J. C. Caldwell, J. H. Stuart, and S. H. Clarke are returning home in the steamship *Victorian*.

Colonel W. L. Gubbins, R.A.M.C., and Civil Surgeons W. Faull and H. M. Roberts are returning home in the steamship *Bavarian*.

The following are also on passage home:—Major W. Hallaran, R.A.M.C.; Civil Surgeons G. A. C. Casalis (?) and D. G. MacArthur; Lieutenant-Colonel R. Vandeleur-Kelly, New South Wales M.S.C.; Major W. B. Nisbet, Queensland M.S.C.; also Captain N. Marden and Civil Surgeons Dunn, Simpson, Lowe, Brew, and Collyns in the *Nubia*.

Among the casualties reported in the action in which Colonel Kekewich was recently engaged appears the name of Surgeon-Captain Kid (?), R.A.M.C., who was wounded in the left hip. He is not in danger.

SOUTH AFRICAN AFFAIRS.

There seems to be little or no change in the military situation. From the last official summary of casualties and losses in the field force in South Africa we gather that the total casualties from all causes reported during the month of September amount to 98 officers and 2710 men, of whom, however, nearly 2000 have been sent home as invalids. Since the beginning of the war the total losses amount to some 75,000 men, but this includes all those invalided home, large numbers of whom have since rejoined their regiments in South Africa. The number of those who have died, or have been discharged the service as unfit, or have been reported missing since the beginning of the war amounts to over 22,000 men, of whom some 17,500 have actually died. Considering the time the campaign has lasted (two years), the constant fighting, and the large size of the force in the field, these losses may not perhaps, from a statistical standpoint, be regarded as heavy, especially when compared with those of other important campaigns in Europe and America. But

it must be admitted that the sacrifice of life and money entailed by the conflict in South Africa has nevertheless been deplorable. It is a poor sort of consolation perhaps, but we are glad to notice that the deaths from disease among officers and men in South Africa reported during the past month only amount to 142, as compared with 241 who have either been killed in action or have died from their wounds.

MR BURDETT-COUTTS AND THE ARMY MEDICAL SERVICES.

Mr. Burdett-Coutts has made a long and vigorous onslaught in the daily press on the new reform scheme for the Army Medical Services, a title which he regards as the most egregious misnomer of all that this war has produced. If the country is deluded into the belief that the Army Medical Service has been reformed, is it not, he asks, adding one more to the many dangerous shams from which we have already suffered so terribly, and which, if not unmasked, will assuredly bring new and worse disaster? He has apparently no misgivings as to the absolute correctness of his own views and statements and uncommonly little tolerance of those of other people. He does not spare anyone, civil or military, and least of all the Secretary of State for War, on whom he first and foremost casts the blame for having drawn up and laid before the Committee a scheme which he has raked with the fire of his criticism through several columns of his published communication. We have not questioned his sincerity and no one who has read his contributions to the controversy about the South African hospitals can doubt the heat and vehemence with which he has thrown himself into it. We are not particularly concerned to defend the report of Mr. Brodrick's Committee, but it is surely not open to reproach because it does not provide for every possible contingency that may arise hereafter. Mr. Burdett-Coutts has written, it must be admitted, many bitter things about the Army Medical Service in the course of this controversy and he has emphatically pronounced his judgment on several matters as if these did not admit of any doubt or were not susceptible of any other interpretation than such as he chooses to put upon them.

IMPERIAL YEOMANRY HOSPITALS.

The Imperial Yeomanry Hospital at Pretoria was transferred on Sept. 30th to the military authorities, and Lieutenant-Colonel Kilkelly, C.M.G., Grenadier Guards, the medical staff, and the nurses and orderlies (who were not then sailing for England) were transferred to the Imperial Yeomanry Hospital at Elandsfontein, where 294 patients, including nine officers had been under treatment. At the date of transferring the Pretoria Hospital 5227 in-patients, including 466 officers, and 1095 out-patients had been treated in that section of the Imperial Yeomanry hospitals, and 77 officers had been under the care of its medical staff in the Chesham Convalescent Home at Johannesbnrg opened by the Imperial Yeomanry Hospitals Committee. This is in addition to 5000 patients treated by the Imperial Yeomanry Field Hospital and Bearer Company, 6093 patients treated in the Imperial Yeomanry Hospital at Deelfontein, and 1066 at MacKenzie's Farm Branch, 19,852 patients have been treated at the Imperial Yeomanry hospitals up to Sept. 30th.

Dr. Rolleston and the other members of the Imperial Yeomanry hospitals, whose services are not required at Elandsfontein, are returning home in Government transports and hospital ships, and are expected at Southampton during the present month.

THE LATE AMIR OF AFGHANISTAN.

The death of the Afghan Amir has been officially confirmed. The news, which could not have been altogether unexpected, for the Amir had of late frequently suffered from gout complicated with other ailments, has nevertheless come at an inopportune moment. The Amir became seriously ill on Sept. 28th and he died at an early hour on the morning of Oct. 3rd last. It is regarded as almost certain that his son Habibullah Khan—who is at Cabul and is a man of ability and has already been entrusted by his late father with the functions of government—will succeed him. The officers of the Army Medical Services, one way and another, have had in the past a good deal of experience of field service in Afghanistan. The relations between the Indian Government and the late Amir, who was an able man of statesmanlike character and determined will, were very amicable and there is every prospect, it is believed, of these relations being continued if his eldest son and heir holds the reins of power.

DEATHS IN THE SERVICES.

Major John Keatly, R.A.M.C., suddenly at Bombay on Sept. 6th, aged 41 years, from ptomaine poisoning. He was in charge of the station hospital at Kasauli, and assisted Major Semple in the administration of the Pasteur Institute which was established there in the summer of 1900. Major Keatly was selected for Kasauli on account of his special surgical knowledge. He was attached to the Oxfordshire Light Infantry in the Frontier campaigns of 1897.

Surgeon-Major-General W. A. Thomson, A.M.S. (retired), Honorary Physician to the King, aged 71 years.

Lieutenant J. B. Hall, R.A.M.C., at Harrogate. He entered the service as Lieutenant in June, 1900.

PRESENTATION OF WAR MEDALS.

Major-General Sir H. Trotter, K.C.V.O., commanding the home district, will present the medals on Sunday, Oct. 27th, at 1 P.M., in Wellington Barracks, to the officers, non-commissioned officers, and men of the London companies, Volunteer Medical Staff Corps, who have recently returned from active service in South Africa. Five officers and about 80 non-commissioned officers and men volunteered and were sent out with the following units: Royal Army Medical Corps, Yeomanry Field Hospital and Bearer Company, Rhodesian Field Force, and Paget's Horse. Three officers and 18 non-commissioned officers and men are still in the field.

THE LATE LIEUTENANT G. H. IRVINE, R.A.M.C.

A memorial tablet subscribed for by the staff of the Bristol Royal Infirmary and other friends has been placed in the chapel of that institution to the memory of Lieutenant G. H. Irvine, R.A.M.C., who was formerly a student in the infirmary and who was killed in action in South Africa in March, 1900.

Correspondence.

"Audi alteram partem."

"THE NEW CHIEF MEDICAL OFFICER FOR CAPE COLONY."

To the Editors of THE LANCET.

SIRS,—I am directed to inform you that an article which appears on page No. 539 of the issue of THE LANCET for August 24th, 1901, and headed "The New Chief Medical Officer for Cape Colony," has been brought to the Colonial Secretary's notice, and that while Mr. Graham is aware of the tenor of the anonymous letters which appeared in *Greater Britain*, a weekly publication which was only issued during the short period from July 22nd to August 24th last, he has advisedly disregarded them as unworthy of any serious consideration and does not contemplate entering upon a discussion of the question as therein raised. I am, however, to state that although the article which appears in your journal carefully abstains from any expression of opinion as to the correctness or otherwise of the statements made in the colonial newspaper, Mr. Graham nevertheless views with no little concern and with much regret the attitude assumed by you of implying that the allegations made in *Greater Britain* might possibly be founded on fact, a circumstance which is far from being the case. I am also to state for your information that no representation has been made to the Government which would justify the statement contained in the article in question that "the appointment has not been favourably received by the medical profession."

I am to add that Dr. Alfred John Gregory, M.D., B.S., D.P.H., &c., &c., was employed in the Health Branch of the Colonial Secretary's Department in public health and sanitation work during the period from Dec. 18th, 1891, to Dec. 1st, 1893, but without any status; that on the latter date he was appointed to the fixed establishment of the Civil Service and to the post of assistant medical officer of health for the colony, an office which he held continuously until August 1st, 1900, at which date the medical officer of health, Dr. George Turner, was detached for duty under the Transvaal Government; that Dr. Gregory was thereupon appointed to act as medical officer of health; and that at the end of February, 1901, Dr. Turner having been appointed permanently to the office of medical officer of health for the Transvaal, Dr. Gregory was then confirmed by my Government in the office of medical officer of health for this colony.

It is not the Colonial Secretary's intention to dilate upon the eminent services which have been rendered by Dr. Gregory to this colony, which, quite apart from consideration of his status in the Civil Service, have fully justified the Government in conferring upon him in recognition thereof that promotion. I am also to inform you that Dr. Gregory possesses, *inter alia*, the following qualifications—viz., Doctor of Medicine; Bachelor of Surgery; Member of the Royal College of Surgeons, England; Diploma in Public Health, Royal College of Physicians and Surgeons, England.

I am to request that you will kindly cause this communication to be published in the next issue of your journal.

I have the honour to be, Sirs,

Your obedient servant,

FRED. WHICHAM,

Assistant Under Colonial Secretary.

Colonial Secretary's Department, Cape Town, Sept. 16th, 1901.

*** We have great pleasure in inserting the above letter which is a satisfactory answer to the statements upon which we commented in our issue of August 24th. We then wrote as follows: "We certainly think that no one should be appointed to the position who is not hall-marked as an expert in sanitary science. Dr. Gregory may be this for all we know." We are glad to learn that Dr. Gregory has the Diploma in Public Health of the English Conjoint Board.—ED. L.

DIFFERENTIAL DIAGNOSIS BETWEEN SMALL-POX AND CHICKEN-POX.

To the Editors of THE LANCET.

SIRS,—As we again have small-pox amongst us and there seems still to be a difficulty in the diagnosis between small-pox and chicken-pox, as proved by the fact that one district has insisted on the notification of chicken-pox, will you permit me to point out a well-known method by which these diseases can be easily differentiated, but which seems to be forgotten, or ignored, when we have small-pox epidemics?

The fact to which I refer is that the vesicles in chicken-pox are unilocular, whilst in small-pox they are multilocular. The practical result of this pathological fact is, that if a chicken-pox vesicle be pricked with a needle its contents can be completely evacuated and the cell will collapse, whereas in small-pox if you make 20 pricks with a needle the vesicle will not collapse, because, being multilocular, it is impossible to empty it.

I am, Sirs, yours faithfully,

GEORGE STEELE PERKINS.

Wimpole-street, W., Oct. 4th, 1901.

TUBERCULOSIS AND HEREDITY.

To the Editors of THE LANCET.

SIRS,—There has come to be a strong popular impression that an inherited influence in the causation of tuberculosis has been disproved by the discovery of its dependence on organisms received from without. The belief is apparently due to some sweeping unqualified statements which have been made that we must discard the idea of actual inheritance of the disease. This, of course, is true, but the facts still remain which have led to the belief that an inherited condition influences the occurrence of the disease. These facts are equally explained by the assumption that that which is inherited or transmitted is a relatively low power of destroying the tubercular organisms which have found entrance into the system. I think that the facts not only remain but retain their significance, even when all allowance is made for the effect of infection from one member of a family to another. Indeed, such relative disability enables us to understand the greater influence of exposure to infection in some families than in others. Moreover, we must assume an analogous acquired disability in order to understand the way in which tuberculosis is a special sequel to some acute diseases or may follow grave deterioration of general health.

The question is important in regard to life insurance. It is said that some offices have ceased to take cognisance of a family history of tubercle in consequence of the widespread impression above mentioned—that an hereditary influence has disappeared from the medical creed. The change seems, however, scarcely credible, since the customary practice is based upon definite experience, on facts which may have to be differently explained but cannot be destroyed by the new knowledge.

The question is also of importance from a practical point of view. If such relative disability may be inherited the members of such families should secure, as far as possible, occupations that involve an open-air life, in order to reinforce the power that is deficient.

I am, Sirs, yours faithfully,

Queen Anne-street, W., Oct. 7th, 1901. WILLIAM R. GOWERS.

THE TREATMENT OF TUBERCULOSIS.

To the Editors of THE LANCET.

SIRS,—Much has been written the last few weeks on the important subject of tuberculosis. I have quite recently read six very clear and instructive addresses on the Treatment of Pulmonary Consumption by Hygiene, Climate, and Medicine, by Dr. J. H. Bennett, which appeared in THE LANCET in September, October, and November, 1866. Dr. Bennett says that phthisis is a curable disease—indeed, in the early stage a very curable disease—under proper treatment. His views and opinions are so precisely similar to those promulgated at the present day that I could not refrain calling the attention of my medical brethren to the fact that, although 35 years have passed, we had gentlemen at that date in our profession who were as much enlightened in the treatment of phthisis as we are at the present time.

I am, Sirs, yours faithfully,

Abingdon, Oct. 4th, 1901. S. I. BAKER.

SANITATION IN WEST AFRICA.

To the Editors of THE LANCET.

SIRS,—In these days of many theories, some sound and others extremely speculative, the question of their practical application has to a regrettable extent been lost sight of in many instances, and has been exceptionally so in the important question of West African sanitation. All honour is due to the many workers in the field of malarial research, but unfortunately the methods of prophylaxis recommended, though excellent in theory, are in most cases impossible of execution. In laying down rules for the prevention of malaria, it appears to have been forgotten that in many parts of the coast the mosquitoes bite freely in the daytime, and also that as the sun rises at 6 A.M. and sets at 6 P.M. all the year round, everyone would have to go into his house and to remain there for 12 hours out of the 24, if the rules were carried out. For the sake of illustration, suppose the gnats at home were infected and were as plentiful as they are out here. What would be thought of a sanitary scheme which involved everybody in England staying in his house from six in the evening to six in the morning? Besides this, the nature of the country, the thousands of natives (who have practically all suffered from malaria), the small number of whites, the fact that these have their work to do—which is just as hard and takes up as much of their time as in England or more—and the expense which would be incurred in their execution, place many of these suggestions outside the bounds of practical utility. Short of carrying out these schemes in their entirety, the following fundamental sanitary principles based on practical experience should, in my opinion, be laid down.

No native huts should be allowed within half a mile of European bungalows, with the exception of the servants' quarters, which should be placed to leeward and as far away as convenient, and the servants themselves should be dosed regularly with quinine under European supervision. All Europeans should take quinine regularly. Mosquito-nets should always be used; if there are no mosquitoes, the nets keep out the damp, and though one cannot help being bitten, safety for eight hours out of the 24 is worth trying for.

The houses should be built broadside to the prevailing breeze which blows almost constantly every afternoon throughout the year from the sea. They should be so constructed that by opening the doors and windows every nook and cranny could be flushed out for an hour or two every day by the wind and the mosquitoes which lurk in quiet corners swept out. No house should be more than one room deep; this is essential for complete through ventilation. They should not be too large—a two-man bungalow should be the extreme, as the greater the number of Europeans who live under one roof the greater the number of natives who go in and out and the greater the risk of those mosquitoes which hang about the house in spite of all precautions becoming

infected. There should be a verandah at least 10 feet wide to protect the walls from the sun and rain. And lastly, all houses should be raised on piles, and a layer of concrete should be put over the whole site. Thick bush and long grass should be kept down in the neighbourhood of the house and the ground should be drained and levelled.

Were the above rules carried out I am convinced that the number of cases of malarial fever would be far fewer. The water-supply can be obtained by storing rainwater collected from the roofs in large tanks; these should be thoroughly cleaned out and lime-washed at least every six months. The disposal of excreta is best effected by Moule's earth-closets; old kerosine or paint drums make excellent pans, which should be emptied daily. Where anopheles pools are found they should be filled up or drained if labour is available, at any rate those in the immediate vicinity of the house. In conclusion, I may add that even if malaria can be stamped out West Africa, owing to the peculiarities of its climate, will still remain a part of the world where the white man can only live for a year or two at a time and then will have to go to a temperate climate to recruit, before he can again resume his duties on "the coast."

I am, Sirs, yours faithfully,

S. W. THOMPSTONE, F.R.C.S. Edin., D.P.H. Camb.

Old Calabar, West Africa, August 29th, 1901.

"WORKHOUSE NURSING."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Oct. 5th, p. 940, Dr. F. S. Toogood makes the following extraordinary charge against me. He says: "Through the courtesy of Miss Louisa Twining I have been able to confirm that which I had previously suspected—viz., that Mr. F. R. Humphreys has annexed and labeled as 'my (Mr. Humphreys's) scheme' the plan formulated by Miss Twining and published by her in July, 1901." Your correspondent has discovered a mare's nest and his imagination has supplied the necessary local colour. There is not the slightest connexion between my scheme and that of Miss Twining, and it is absolutely incredible that Miss Twining could have led Dr. Toogood to think so.

I have before me as I write a printed form dated Sept. 23rd, 1901, from the editor of one of the great monthly magazines in which the editor says that he "will have much pleasure in giving his earliest consideration to the article kindly proposed to him by Miss Louisa Twining on Nursing in Poor-law Infirmaries by Dr. Humphreys." No one would give an introduction to another person for the purpose of assisting him to publish an article which he has been robbed of. I must therefore call upon Dr. Toogood at once unconditionally to withdraw his charge against me, and in order to afford him an opportunity of so doing I am sending him a copy of this letter in a registered envelope. I am also sending a copy to Miss Twining.

In his previous letter he made a charge against the Workhouse Infirmary Nursing Association which I asked him to withdraw. He has neither done this nor substantiated his statements and he adds to his flagrant conduct by making fresh assertions in his last letter. Let him withdraw his charges against the association or substantiate them.

I am, Sirs, yours faithfully,

Fellows-road, N.W., Oct. 6th, 1901. F. R. HUMPHREYS.

To the Editors of THE LANCET.

SIRS,—I am not going to enter upon a literary controversy, but my attention having been drawn to a letter from Dr. F. S. Toogood in which I am concerned, I must ask you to allow me to say that in writing to him I merely expressed my satisfaction on finding that Mr. F. R. Humphreys was advocating the plan which I had so often suggested for the amalgamation of the sick in central workhouses, which I considered the only remedy in the case of the small country ones. It cannot be of the slightest importance to anyone to know who first started the idea and I regret to see such a question named. Having worked with the association for 22 years, may I add my conviction that all the accusations made against it are absolutely unfounded?

I am, Sirs, yours faithfully,

Oct. 7th, 1901. LOUISA TWINING.

"THE ELECTROLYTIC TRANSMISSION OF SULPHUR."

To the Editors of THE LANCET.

SIRS,—In reply to Dr. Longridge's letter of Sept. 28th I consider that he is wandering from the subject altogether. My "discovery" applies only to the Harrogate sulphur waters, and if he can prove that anyone else made it before me I am willing to drop the word. Till then I stand by my guns.

I am, Sirs, yours faithfully,

Harrogate. FRANCIS WM. SMITH.

A MEDICO-LEGAL SOCIETY.

To the Editors of THE LANCET.

SIRS,—I venture to suggest the formation of a medico-legal society, the chief object of which should be the discussion of questions of a legal character arising in every branch of medical work. No doubt there are many teachers of medical jurisprudence, medical barristers, and others willing to form such a society, the advantages of which are obvious.

I am, Sirs, yours faithfully,

Oct. 7th, 1901. M.D., D.P.H., Barrister-at-Law.

THE GENERAL MEDICAL COUNCIL AND REGISTRATION.

To the Editors of THE LANCET.

SIRS,—Allow me to submit a case in illustration of the hardship of the present regulations, or want of regulations, of the General Medical Council on the registration of students commencing their course of medical study. My son is studying at a large public school which provides a course of study in science, especially arranged for the preliminary scientific (M.B.) and intermediate science examinations at London University. The school is accordingly recognised by the Conjoint Board of the Royal Colleges of Physicians and Surgeons for the commencement of professional study. Having passed his matriculation examination my son has entered on the science course at this school, but his application to the General Medical Council to be registered is refused on the ground that the school, though recognised by the licensing bodies, has not been approved by the Council. It seems, therefore, that the result of the want of understanding at present painfully evident between the Council and these bodies is to inflict grave hardship and injury upon individual students who may be deprived of a year's counting in their curriculum. Nor is it easy to ascertain what institutions are at the present time approved by the Council. The election of Direct Representatives is about to take place. Can nothing be done to bring the authorities which preside over medical education into agreement on some equitable terms? They disagree; we suffer.

I am, Sirs, yours faithfully,

London, Oct. 7th, 1901. M.D., &c.

"THE RECONSTITUTION OF THE ROYAL ARMY MEDICAL CORPS."

To the Editors of THE LANCET.

SIRS,—With great interest I opened THE LANCET this morning to see what you thought of the War Office Committee's scheme for improvements in the Royal Army Medical Corps and it was with not a little astonishment that I read your editorial views on the subject. I think that I am but expressing the views of nine-tenths of the officers of the corps when I say that Mr. Brodrick has made an honest and sincere effort to improve the medical service of the army, but that unfortunately in this particular case he has sought advice from men who, judging from their proposals, seem to have but an imperfect idea both of the conditions under which the corps works and of the administrative difficulties inseparable from working a medical *personnel* scattered all over the world.

Within the last week I have taken the opinion of at least 40 officers of the corps on this scheme, and I can assure you that not one of them thinks it other than unworkable. The only bright spots in the proposals are the granting of adequate rates of pay and the simplification of the entrance examination. The great blots on the scheme are the abrogation of the right to retire after 20 years' service on £1 a day; the failure to make the Advisory Board one which

can enforce its recommendations and not merely advise and supervise; the omission to lay down any minimum strength of officers and men for the corps; and the absolutely ludicrous system of periodical examinations. These latter, to my mind, constitute the worst feature of the scheme, for they indicate a system of distrust of the individual and the establishment of a series of inquisitorial tests only calculated to develop a class of book-worms and men well based in laboratory experiments and technique, but devoid of those clinical and manly attributes which are essential for the making of a good soldier-doctor. With the institution of these recurring examinations and periodical attendances at certain hospitals, it will be interesting to know how and by whom the foreign service is to be done, and how rosters for such service are ever to be kept. Much as I want to see the corps placed upon a sound footing, and, moreover, flourishing both in numbers and reputation, I fear that such will never be secured by any such *dilettante* and academic methods as are now proposed. And, what is more, I feel sure that no men worth having in the corps will ever consent to enter it on terms of such precarious tenure as are now offered to them in this tentative scheme. The more one reads the scheme and thinks over it the more one marvels how the 13 intelligent men who composed the Committee can have seriously put it forward as a remedy for the existing state of things. They seem to have lost sight of the fact that they are not legislating for students but for men as old as, and in some cases older than, themselves. The corps is full now of men eager to work and perfect themselves in their profession, but only lacking the opportunities owing to excess of foreign service and inability to obtain leisure leave. The *personnel* of the corps is right enough; it only needs an increased establishment to ease the pressure. The granting of adequate pay alone will do that and the rest will follow.

THE LANCET is an influential journal and it is much to be regretted if its editorial views fail to be in touch with the great mass of professional opinion. Certainly, in this particular case I think that a further examination of the scheme will suggest a modification of your expressed approval.

I am, Sirs, yours faithfully,

Oct. 5th, 1901. IMMUNE.

*** We simply stated the general effect of first impressions which we received from a perusal of the report, and we said that the recommendations were in the nature of an experiment. The scheme is but a scheme and can be modified.—ED. L.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Henshaw's Blind Asylum.

ARCHDEACON WILSON'S strictures on the care of the blind at Henshaw's Asylum drew forth a long defence of the institution in the *Manchester Guardian* of Oct. 4th, and on the 7th there was another letter from Archdeacon Wilson in which he made specific statements which show that there are many matters as to which improvement is desirable. It seems that when a surprise visit was made by His Majesty's Inspector he found "the state of the building unsatisfactory in point of cleanliness," which Archdeacon Wilson more than confirms from his own observation. The latter mentions "uncleanly arrangements for washing" and the "condition of the closets," as to which "details might be added which would be not only distasteful but disgusting." Supervision may also be improved if, as is stated, somewhere about 40 blind boys in one dormitory are supervised by a "blind man sleeping in an adjoining apartment," which is said to have been the case a month ago. "A sick-room of four girls, two of whom were very ill," was in charge "of a nearly blind woman who could not perceive how dirty the beds were." Various other points were mentioned. The food seems to be sufficient and of good quality, but when Archdeacon Wilson was there no knives and forks were in use, but only spoons, and "the result was that all were fed on minced meat," and he adds, "think of the awful sameness." Other matters, as education, work for the blind, &c., are touched on which seem to be in need of revision, but those mentioned above are important in their relation to health and morals. It appears that there are no women on the committee, although the statements as to the girls' sick-room and the picture of the comfortless sitting-rooms and of "the poor old women sitting silent on the hard benches," show that there is room at the asylum for the sensible but sympathetic work of educated women. The meetings of the committee are probably occupied chiefly with the business matters of the institution, so that with no "wilful neglect or breach of trust" they may be open to the charge which Archdeacon Wilson makes of lack of observation, of special knowledge, "and it may be lack of control of their officials." Let it be hoped that the prominence now given to the asylum will result in improved treatment of the blind and the increased prosperity of the institution.

Less Cubic Space for Lascars than for Whites.

At a meeting of the Manchester Port Sanitary Authority held on Oct. 7th it was reported that during the month of September 136 vessels had been examined, in 28 of which defects or insanitary conditions were found. Dr. J. Pringle, the medical officer, had inquired into a case of overcrowding on a vessel carrying a Lascar crew. In one compartment of the forecastle certified to carry 14 white men there were 16 Lascars, and in another certified for two white men there were four Lascars. The captain stated that the cubic space and floor area which were required by the Indian Government were provided. The boat originally carried a white crew and it seems that 16 Lascars are considered equal to 12 whites, and in this case 20 had the accommodation for 16 whites. It is said that the Board of Trade standard of accommodation for white men of 72 cubic feet, which is not over liberal, did not apply to Lascars. The latter are presumably employed for the sake of economy, but it is scarcely to be expected that the overcrowding of coloured men will increase their efficiency or tend to the true economy which is promoted by health and vigour.

Salford Cottage Homes.

Salford is making provision for her pauper children away from the injurious influences and associations of the workhouse. The foundation-stone of cottage homes for children was laid on Sept. 19th at Culcheth, in the open country, where 45 acres of land were bought for £4500. The estimated cost of the work when completed is £63,711. There are to be 11 semi-detached homes for 12 children each, with rooms for the foster-mother, and two single homes accommodating 12 each. There will be an infants' school and a mixed school to accommodate 399 boys, girls, and infants, and a hospital for 16 children and the requisite staff. There will also be playgrounds, and the elder boys will be taught trades and the girls sewing and housework. The plans have been arranged to admit of extension. The work is to be completed in two years. At a tea given after the ceremony Mr. W. Moorsom, assistant inspector of the Local Government Board, spoke of the gratification he had felt at the condition of the children at the Chorlton Board's Styal Cottage Homes. He also spoke with equal approval of the "non-Poor-law homes" established by the Wesleyan body at Edgeworth. Mr. Alderman Mainwaring, chairman of the Chorlton Board, said that "he had come to the conclusion that pauperism was not hereditary." No doubt the children of paupers became paupers from infection, if the term may be so applied, as phthisis is often passed from parent to child, and the tendency for the children to drift to the workhouse, as was the rule in the old days, will be checked if only they are preserved from its associations during childhood.

Infectious Diseases Hospital for Preston.

At the meeting of the Preston Town Council on Sept. 26th a motion was passed in favour of the erection, at a capital outlay of £20,000, of an infectious diseases hospital. From January to Sept. 24th, in addition to cases of typhoid fever, diphtheria, erysipelas, and other infectious diseases, the Health Committee had had to deal with 1448 cases of scarlet fever. In the discussion on the proposal Dr. Browne said that every year typhoid fever was present in the town; every winter there was a certain amount of diphtheria, while scarlet fever, seldom absent, returned every three or four years with renewed vigour. "If the members of the council could go with him on his rounds and see the results accruing from non-isolated cases he was positive that not a single objection to the expenditure would be forthcoming."

The Drought.

There was a heavy rainfall on Oct. 5th and 6th on the Longdendale gathering grounds, which augmented the stock

of water in hand by 141,000,000 gallons and raised the estimated supply from 21 days to 25 days. It seems as if the drought were coming to an end at last, but the same has been said before only to be falsified by the event. There is abundance of water in Thirlmere, but the quantity supplied must remain as it is till more pipes are laid.

Oct. 8th.

WALES AND WESTERN COUNTIES.

(FROM OUR OWN CORRESPONDENTS.)

Conferences on Tuberculosis at Cardiff and Swansea.

THE Mayor of Cardiff began his year of office by setting before his fellow-townsmen the special claims of the Cardiff Infirmary and by successfully wiping out within a few months a debt upon the institution of £12,000, and he has made the closing weeks of his official year memorable by convening a conference to discuss the question of the prevention of tuberculosis. This conference, which met at the Town Hall, Cardiff, on Oct. 3rd, was a most representative gathering of men from every part of South Wales and Monmouthshire, about 500 persons being present. Lord lieutenants, high sheriffs, mayors, chairmen of county councils and of district councils, delegates from sanitary authorities, medical officers of health, and a large number of medical practitioners responded to the mayor's invitation. The meeting was addressed by Dr. Isambard Owen and Dr. Alfred Hillier, after which the following motion of Sir John T. D. Llewelyn and Dr. C. T. Vachell was unanimously carried:—

Dr. Isambard Owen and Dr. Alfred Hillier as representing the Central Committee, having explained the object of the Association it is resolved that a branch of the National Association for the Prevention of Consumption and Other Forms of Tuberculosis for South Wales and Monmouthshire be and is hereby formed.

Subsequent resolutions elected Lord Windsor (the Lord Lieutenant of Glamorganshire) as president, various ladies and gentlemen as vice-presidents, a treasurer, Dr. Eldon Pratt of Cardiff as secretary, and a large executive committee (the members of which include the presidents of the local medical societies and of the West of England and South Wales Branch of the Incorporated Society of Medical Officers of Health). The executive committee were empowered to collect subscriptions, to obtain approved public lecturers, to diffuse literature relating to the prevention of tuberculosis, and to promote the establishment on a partially self-supporting basis of open-air sanatoria for tuberculous patients. The subscription to the branch was fixed at 5*s.* per annum. At the close of the meeting Dr. W. G. Savage gave at the Cardiff and County Public Health Laboratory a very interesting description with the aid of lantern slides of some of the principal continental and British sanatoria. On Oct. 4th Dr. Isambard Owen addressed a large meeting at Swansea, when it was decided to establish an auxiliary branch to the South Wales and Monmouthshire branch created at Cardiff on the previous day. It was very noticeable both at the Cardiff and the Swansea meetings that the speakers lay and medical urged the importance of notification of cases of phthisis to the medical officer of health. The chairman of the Monmouthshire County Council (Alderman E. Grove) advised not only compulsory notification but also compulsory removal of phthisical patients to rate-aided sanatoria. The Health Committee of the Cardiff Corporation have for some time been active in the direction of the prevention of tuberculosis. About two years ago the medical officer of health (Dr. E. Walford) issued not only a general circular on the subject, but a memorandum was also sent to medical practitioners in the town offering free bacteriological examination of sputum and asking for voluntary notification of tuberculous cases coming under their care; a circular was at the same time sent to all purveyors of milk and cowkeepers pointing out their obligations under the Dairies, Cowsheds, and Milkshops Order of 1899 and offering the free application of the tuberculin test. In the year 1900 there were 322 deaths in Cardiff from various forms of tuberculosis, and in 84 cases disinfection was carried out by the sanitary authority at the request of medical practitioners or of relatives of the deceased person. There are no placards with regard to spitting distributed in Cardiff, but for several years past in the free libraries and museum of the town there has been prominently displayed the following notice: "The reading-room attendant has been instructed by the committee to expel from the building any person found spitting."

Llangyfelach Rural District.

Mr. F. T. Bircham, general inspector of the Local Government Board for Wales and Monmouthshire, does not confine himself to Poor-law administration, but has recently been attending the meetings of some sanitary authorities in his district to whose notice he has brought some of their shortcomings. On Oct. 1st he told the Llangyfelach Rural District Council that the Local Government Board must have some definite promise that the council was providing an adequate water-supply for the district, sewerage schemes in particular parts of the district, and an isolation hospital. The chairman of the council protested that the authority was doing its duty in these matters, because drainage schemes should be preceded by an adequate supply of water, and that an arrangement had been made to obtain this supply from the Swansea Corporation upon completion of the new waterworks in five or six years' time.

Bridgend Workhouse.

The need of increased accommodation at the Bridgend Workhouse has been frequently during the last few years urged upon the board of guardians by the Local Government Board. In July last when a definite proposal to carry out the extensions was made it was defeated by a motion to defer the work for twelve months. Since then it has been decided to carry out a very small portion of the extensions by erecting a kitchen and laundry. As one of the most urgent needs of the institution is the provision of an infirmary, which it is estimated will cost about £5000, the Local Government Board will only sanction a loan for the erection of the kitchen, &c., on condition that the infirmary is also proceeded with very shortly.

Home for Consumptives at Bristol.

At the meeting of the Bristol Board of Guardians held on Oct. 4th several members spoke very strongly on the necessity for procuring a site near Bristol and at once erecting suitable buildings both for the treatment of acute cases of phthisis and for patients in the early stages of the disease. In the meantime it was decided to continue the arrangement with the North London Hospital for Consumption at Hampstead whereby two beds in this institution are at the disposal of the board for a yearly payment of £105.

Devonport Infectious Hospital.

At an inquest held at Devonport on Oct. 4th upon a child who had died in the Infectious Hospital it was stated that there was no mortuary in the hospital, a nurses' bathroom being used for that purpose. The coroner said that many schemes had come before the borough council for the enlargement of the hospital, and doubtless when the building was enlarged a mortuary would be provided.

Oct. 7th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The late Bailie Pollard of Edinburgh.

I REGRET to have to announce the death of Bailie Pollard, whose name was a household one in connexion with all matters bearing upon the public health and the sanitation of the city of Edinburgh. For close on 20 years Mr. Pollard had been connected in one or other capacity with municipal works in Edinburgh. In 1891 he became convener of the Public Health Committee of the Town Council in succession to Sir James Russell, and in 1894 he was elected a Bailie. As convener of the Public Health Committee Mr. Pollard's work was most important and deserves full recognition. He was an enthusiastic worker in the region of public health and spared no pains to make his knowledge of the subject as complete as possible. Mr. Pollard paid several visits to Germany in order to study the municipal institutions of that country. He was especially interested in the welfare of the fever hospital and its patients, and during the whole time that he was convener of the Public Health Committee he paid when in town a weekly visit to the hospital when he saw practically every patient in the house. He in this way became personally acquainted with every member of the medical and nursing staff of the hospital. He and his wife also took an interest in the wives and families of the men of the poorer class whom he came across in the hospital, visiting them in their own homes and doing all he could

to help them. Mr. Pollard threw all his energies into the scheme for building a new fever hospital at Colinton Mains. He, together with the city superintendent, travelled over a large part of Europe in order to become familiar with the latest improvements in hospital construction, so that the new hospital might be as suitably constructed and well-equipped as possible. The formal opening of the hospital was to have taken place in the summer, but was put off on account of Mr. Pollard's illness, and he has not lived to see the full completion of the work. During the last few years Mr. Pollard interested himself in the question of the stamping out of tuberculosis and he had suggested that when the new fever hospital was opened a portion of the old building in Infirmary-street might be set apart for the use of persons in the last stage of consumption and therefore sources of danger to the community. Mr. Pollard is survived by a widow and three young daughters. The funeral took place on Sept. 28th, and was attended by a large and representative gathering of citizens of all classes. Mr. Pollard was held in the highest respect and esteem both for his own and for his work's sake.

The New Edinburgh City Hospital.

The new City Hospital, in the construction of which the late Bailie Pollard was so keenly interested, is not yet ready for occupation, although the external fabric has been practically completed. The selection and insertion of the internal fittings cannot be done hastily in view of the demands of modern medicine, so that at least a year will elapse before the structure is ready for occupation.

Glasgow University.

At the meeting of the Glasgow University Court on Oct. 3rd Professor John Young intimated that on the recommendation of his medical advisers he had determined to ask permission to retire from the chair of Zoology which he has occupied for the long period of 35 years. In making this announcement Professor Young stated that he did so with great regret, but that the state of his health compelled him to take this step in the interests both of himself and of the university. While resigning his chair he hoped to be able to retain his position as keeper of the Hunterian Museum and to discharge all the responsibilities of that office. On behalf of the court Principal Story and Sir John Neilson Cuthbertson expressed profound regret at the prospect of Professor Young's withdrawal and trusted that the university would long enjoy the advantages of his services in connexion with the museum to which he had given so many years of earnest and ungrudging labour. In addition to the chair of Zoology, Professor Young has held for many years the Honeyman-Gillespie lectureship on Geology founded in 1876. He has been an ardent advocate of the proposal to erect this lectureship into a separate chair, but hitherto want of funds has made this impossible. It is probable that the present vacancy will be utilised to separate the two appointments. The patronage of the vacant chair is in the hands of the Crown. The income is about £800 per annum. The following appointments have been made by the University Court: Dr. James F. Gemmill to be Lecturer in Embryology, Dr. Charles Workman Lecturer and Examiner in Pathology, Dr. John Lindsay Steven Lecturer and Examiner in Medicine and Clinical Medicine, and Dr. Magnus Maclean to be Additional Examiner in Physics for Degrees in Medicine and Science. The opening of the medical classes at the University and extra-mural schools is announced for Thursday, Oct. 17th. Ferguson scholarships of the value of £80 each per annum and tenable for two years have been awarded to William Rennie, M.A., of Edinburgh University, and to David Macfarlane Stewart, M.A., and Alexander Dunlop Lindsay, M.A., both of Glasgow University.

Port Sanitary Authority for the Clyde.

The recent outbreak of bubonic plague in Glasgow, followed as it was by an epidemic of small-pox, has caused the sanitary authorities to search for the weak points in their armour. One of these, it is urged, is the want of effective medical control over vessels entering the port. The jurisdiction of the Glasgow health authority, of course, begins and ends at the city boundaries, and a similar statement is true of the other municipal areas which fringe the banks of the Clyde. Thus the same vessel, in being moved, for example, from one dock to another, may, even on successive days, come under the claim of different authorities. In so far as any general supervision of vessels entering the Clyde is undertaken this is effected at Greenock, where the customs authorities board vessels and report the presence of any infectious disease to the local health officer. These arrangements are admittedly unsatisfactory, and the Glasgow Corporation, with a view to remedy them, has applied for a provisional order to create the corporation the port sanitary authority for the river. During the past week an inquiry in connexion with this application has been conducted in Glasgow before Sheriff Jameson. The witnesses called in support of the corporation have included Dr. A. K. Chalmers (medical officer of the city), Professor John Glaister, Dr. E. W. Hope (medical officer of the city and port of Liverpool), and Mr. Mackenzie (general manager of the Clyde Trust). The burghs of Greenock and Govan, and various county councils having authority in the Clyde basin, appeared by counsel to oppose the application, some of them condemning such a proposal as unnecessary and others advocating the establishment of a joint sanitary authority. After several days' hearing Sheriff Jameson intimated that he should make his report to the Board of Supervision. The result has not yet been made public.

Glasgow Parish Council.

In his annual report to the Glasgow Parish Council Mr. John Carswell deals again with the alleged increase of lunacy. The figures of his report show that the local occurrency rate has increased from 44 per 100,000 in the years 1890–95 to an average of 64·9 since that period. But the real cause of this increase, Mr. Carswell argues, is the improved administration of the Lunacy Acts and a diminution of the prejudice against pauper asylums. The report also discusses the question whether the saving of life in childhood by protection from infectious and tuberculous disease helps to increase the number of insane in adult life, and here also a negative conclusion is arrived at and supported by argument.

The late Dr. James McLintock.

The death is announced of Dr. James McLintock, who was appointed a medical member of the Local Government Board for Scotland when that body was first established, and who only retired from the Board about three years ago. Dr. McLintock has left the record of his work written in much of the public health legislation now exercising such a beneficial influence throughout the country, and in this way he has well served both his own and successive generations.

Glasgow Medico-Chirurgical Society.

The office-bearers for the session 1901–1902 are as follows: President, Dr. W. G. Dun; vice-presidents, Dr. J. Lindsay Steven and Dr. A. E. Maylard; treasurer, Dr. R. Barclay Ness; editorial secretary, Dr. Hugh McLaren; general secretary, Dr. W. K. Hunter. The first meeting of the current session was held on Oct. 4th, when the President delivered his inaugural address, his subject being Blood-letting in the Treatment of Disease.

Bequests to Glasgow Hospitals.

Under the trust disposition and will of the late Sir William Laird a sum of £10,000 is allotted for distribution among various charitable institutions in the West of Scotland. The principal legacies are: Glasgow Royal Infirmary, £2000; Western Infirmary, £1000; Victoria Infirmary, Royal Hospital for Sick Children, and Asylum for the Blind, each, £500. The Merchants' House of Glasgow and the Alexandra Hospital, Coatbridge, also each receive £1000.

Oct. 8th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Mourne Water-supply for Belfast.

SIR ROBERT MCCONNELL, Bart., D.L. (ex-mayor of Belfast), formally opened the new service reservoir at Knockbracken on Oct. 2nd. This is situated on the Saintfield-road, about five miles from the centre of the city of Belfast; it is in water surface 17½ acres and its capacity is about 100,000,000 gallons. The object of this reservoir is twofold: it maintains a steady pressure in the district of supply and it has sufficient water in store to keep up the supply when repairs are requisite on the aqueduct. From the Kiekeel river (in the Mourne mountains) to the Knockbracken reservoir the length of the aqueduct is about 35

miles. In ordinary level ground the cut-and-cover mode of construction has been followed (16 miles), through mountains tunnels have been driven (seven miles), and valleys have been crossed by means of dips formed of steel (where the pressure is greatest) and cast-iron pipes (12 miles). The longest tunnel is three and a half miles through rock and the most difficult one was made under Slieve Donard mountain, near Newcastle, two and a quarter miles through granite and indurated Silurian rock, the latter being the most obstinate to penetrate. It took three and a half years to make this tunnel. At present the water will come from the Annalong river (a temporary cut having been made from that stream), but south of that river the works of the aqueduct are incomplete. In a few months the southern part of the aqueduct will be so far complete that the Annalong river will be laid under contribution. These streams will give 10,000,000 gallons per day for seven or eight months in the year, and by using this supply in conjunction with the reservoirs on the existing works sufficient water will be provided in the summer to tide Belfast over for several years, but it is intended, also, in the future to build two reservoirs, one in the "Silent valley" of the Mourne mountains and the other in the "Annalong" valley. Up to the present £700,000 has been spent and to complete the works in hand another £100,000 will be needed. To construct the "Silent valley" reservoir £250,000 will be required, and to develop the entire scheme (in order to bring in the waters of both rivers) a further sum of £300,000 will have to be expended, so making the grand total more than one and a quarter millions of money. By spreading the expenditure over a number of years the ratepayers have felt it very slightly. When the works are complete Belfast will possess an unlimited supply of good water.

Fermanagh Infirmary.

On Oct. 2nd, in the Town Hall, Enniskillen, the Earl of Erne opened a bazaar to raise sufficient money to allow the necessary improvement of the infirmary to be carried out on modern lines. All classes and creeds have combined to make the sale a success. The infirmary dates back to 1765.

The Irish University Question.

Dr. W. A. McKeown (Senator of the Royal University of Ireland) has published in the Irish press an article which, he thinks, proves that in relation to the medical profession Irish medical schools educate far more medical men than can find occupation in Ireland. In proof of his statement he publishes two tables:—

Table showing the Distribution of Persons holding Irish Medical Qualifications according to the Medical Directory of 1900.

—	Resident in Ireland.	Resident in London.	Resident in England (provincial).	Resident in Wales.	Resident in Scotland.	Resident abroad.	In the Naval, Military, and Indian Medical Service.	Total.
Graduates of the Royal University of Ireland	568	135	379	29	9	114	279	1513
Graduates of the University of Dublin	361	65	283	12	1	122	190	1034
Licensees of Irish licensing bodies	1081	201	627	43	7	303	343	2605
Total	2010	401	1289	84	17	539	812	5152

This demonstrates that the medical graduates of the Royal University are greatly in excess of those of the University of Dublin, that the number of practitioners holding Irish qualifications and resident in Ireland is 2010, and that the number of practitioners holding Irish qualifications and resident outside Ireland is 3142; but as this table does not show fully the work done by Irish medical schools, as many students holding certificates of attendance at Irish schools and hospitals go to Scotland for their final qualifications, Dr. McKeown gives another table showing the medical practitioners resident in Ireland, chiefly educated in Ireland, who have taken qualifications elsewhere. These for practical purposes may all be regarded as Irishmen. Only a few Scotchmen or Englishmen settle in Ireland and mostly in connexion with medical schools.

Licensees of Scotch licensing bodies	370
Licensees of English licensing bodies	29
Graduates of Scotch universities	66
Graduates of English universities	4
Graduates of colonial and foreign universities	8
Total	477

Further, a great many medical students educated in Ireland take qualifications from Scotch licensing bodies but settle outside Ireland. It is impossible to give the numbers of these. Dr. McKeown submits that these tables show that no additional facilities are required to induce students to engage in study for the medical profession. Existing schools should be better equipped, but no new universities, local or sectarian, are needed. The medical schools of Cork, Galway, Dublin, and Belfast could educate two or three times the number of students who at present resort to them. Galway, according to Dr. McKeown, has only supplied 16 medical graduates in 10 years and there is, therefore, no adequate reason why it should be maintained, the results being certainly not commensurate with the cost of keeping up the medical faculty of that college.

The Royal University of Ireland.

The final (M.B.) examinations of the Royal University of Ireland were held last week, the results being announced on Oct. 7th. The two inspectors of the General Medical Council, Dr. D. C. M'Vail (Crown Representative for Scotland) and Sir George Duffey, were present and closely watched all the modes of examination. It will be interesting to have their report.

Cork Hospital Saturday Collection.

The Cork Hospital Saturday collection was held under rather unfavourable circumstances as far as the weather was concerned, and for that reason it was expected that it would be a comparative failure. However, the street collections realised nearly as much as in the previous year, and it was a great source of pleasure to the ladies to find that the really poor were so ready to contribute what they could towards the support of the hospitals. Owners of large firms had collections made amongst their employés, and from that source rather large sums were received. Last year, mainly through the instrumentality of the Lord Mayor (Sir Daniel Hegarty), hospital aid associations were established, and through their instrumentality collections were made in some of the country towns. This year the operation of those associations has been extended and it is anticipated that the result will be a substantial addition to the resources of the various city hospitals.

Cork North Infirmary.

Mr. Denis Murphy has been appointed pathologist to the Cork North Infirmary.

Oct. 8th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Infant Life Protection.

A LAY newspaper has commenced a campaign against the medical department which is charged with the protection of infant life. The fight is being waged in a series of articles written by a Parisian medical practitioner and the articles have created a great sensation. They affirm that the medical inspection of sucklings is very inefficiently carried out, that infants in the country who are brought up by hired wet nurses are very rarely inspected by the medical officer in charge of the department in question, and that the excessive mortality amongst such children is due to this cause alone. Numerous letters from inspecting medical officers have appeared in the newspaper in question, none protesting against these allegations, but, on the other hand, confirming them, while they declare that the lamentable situation is due to the exceedingly faulty organisation of the department concerned. Since 1874 there has existed in France a law called the "Loi Roussel" which provides for the medical inspection of children brought up in the country by hired wet nurses and that law deals both with children of town parents who have been confided to such nurses by their parents and with the children of women who may have left the country for the town to become wet nurses in various families and who have handed over their children during the time of their service

either to their relatives or to neighbours still resident in the village. The law also provides that every woman going to a city to take a place as nurse in a family should have a certificate from the mayor of her village saying that her last child was living and had reached the age of at least seven months, or else was being brought up in the village by a woman possessed of the necessary qualifications for carrying out this duty properly. Moreover, when she reaches the city the would-be nurse is not to be entered on the register until she has undergone medical examination which must state that she is suffering from no contagious affection and that she is in a proper state of health to furnish a plentiful supply of healthy milk. The supervision of the children remaining in the village, as I have just said, is confided to medical inspectors who are obliged to visit each child at least once a month, as well as when they are summoned by the nurse in charge, but, as a matter of fact, this department, which looks exceedingly well on paper, works very badly in practice. The woman who leaves her village to become a nurse in a town has no difficulty in getting a certificate from the mayor, who hardly ever refuses one lest he should become unpopular. No certificate is required from the medical man of the village, which is the only one that could have any value. The duties of the medical inspectors are very badly carried out and the remuneration which they receive for their work is quite insufficient. They only receive one franc for their monthly visit and the patient may very likely live seven or eight kilometres away from the residence of the medical man. Thus a medical man who had 30 nurslings on his list would receive 360 francs per annum and might very likely be obliged to travel more than 1000 kilometres to see them. It may be said that no medical man is obliged to undertake such a post, but, as a matter of fact, he is obliged to do so, because, supposing he refuses, even in a very poor village where there is difficulty in gaining his livelihood the mayor does not hesitate to put out advertisements for a young medical man to take the post, and such a post is generally snapped up, for a young practitioner who is just beginning his career imagines that he may in this way lay the foundation of a practice, and thus he renders the situation of the medical man already in possession even more difficult than before. Finally, this minimum fee of one franc is only payable to the medical man for his obligatory monthly visits. Any other visits which he may make at the appeal of the nurse are supposed to be paid for by the relatives of the child, who, however, often refuse such payment. Even if the visits of the medical inspector are made regularly the reports of the medical man are not of much use, for if he states that the child is being brought up in an improper manner his report produces next to no result. He can only send in such a report to the Prefect, and it is only after two or three such reports have been received that the Prefect at length decides to send a departmental inspector to interview the nurse. Very often such inspector is not a medical man and the only thing he can do is to make remonstrances, which are passed over in silence. The medical man ought to have the right to take away any child at once from the house of a nurse who is not doing her duty properly and to place such child in a departmental *crèche* pending the time that the Prefect can or will communicate with the relatives of the child. The Prefect of Police in Paris has been stirred up to action by the reports published in the newspapers and has just issued an order, but it will probably have no result. The Prefect, who is unable to make the necessary new laws, can do nothing but insist upon the rigorous application of the existing law—that is to say, the Loi Roussel—and the only thing which the order does is to insist upon the necessity of a certificate from the mayor for any nurse who comes to seek a situation in the city. As a matter of fact the mayor never refuses such certificate, and even if it is found to be false the penalty to which the mayor could be sentenced is so severe—viz., the sentence of hard labour—that the Government would not dare to sentence one who may be a faithful public servant for such a slight matter. If such a sentence were passed, it would frighten a great many women who would simply do without the certificate of the mayor and who would come to town without taking the trouble of getting put upon the register: they would seek a situation on a simply personal recommendation, and this recommendation would be considered quite sufficient by a number of families, and so the nurse would escape altogether from the medical control which the Prefect of Police at present exercises over those whose names are on the register. As a matter of fact it is perfectly well known that out of 22,000 persons who annually take over the charge of nurslings in the country only 4000 have any authorisation from the Prefect to do so. 18,000 nurslings are annually given over to nurses known to their parents only by a simple recommendation and are without any prefectural control. The circular sent out by the Prefect in Paris, which makes admission to the register very difficult, will do nothing except to augment the number of nurses who are anxious to escape from it. It would have been more simple and much more rational to have made it necessary for a nurse to obtain, in place of the certificate of the mayor, a certificate from the local medical man, who is in a position to judge of the condition of health in which the nurse is. Such a medical man would be conscious of his responsibility and would have an interest in seeing that later the nurse brought up the child entrusted to her care in a proper manner so that his certificate would be justified.

Unveiling of a Memorial to Pasteur.

On Sept. 29th a memorial was unveiled to the memory of Pasteur at Arbois, his home. The memorial is the work of Monsieur Daillon, the sculptor, and Pasteur is represented seated. On the other side of the pedestal, which is severe in style, are two bas-reliefs representing respectively a group of vine-dressers and herdsmen, symbolising the services which Pasteur rendered to agriculture, and the other showing the operation of inoculation for hydrophobia. On the plinth is a medallion containing the effigies of the father and mother of Pasteur. The Minister of the Colonies, who presided at the ceremony of unveiling, finished his oration by saying that if throughout the world there is one popular Frenchman that one is Pasteur.

Oct. 7th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The Plague at Naples.

THE official bulletins in regard to the plague at Naples show that no serious extension of the outbreak has yet occurred. On the evening of Oct. 5th no fresh case had been reported in the city for 10 days and it was expected that on the 6th Naples would be officially declared free from the disease. Many suspected cases, indeed, have been reported to the authorities both from the city itself and from the neighbouring centres of population, but with the exception of one case at San Giovanni a Teduccio (which was immediately isolated) none of these cases have proved to be plague. At present there are seven cases at Nisida actually under treatment, and 135 "contacts," the latter being in good health except one girl who has a rise of temperature and is being carefully watched. Several false alarms have also been sounded at Rome, but fortunately all have turned out to be entirely baseless. The task of disinfection at Punto Franco, the locality where the first cases were discovered, has proved a most difficult one to carry out effectually, on account of the legal questions as to compensation and the powers conferred by law upon the sanitary authorities to which it has given rise. The value of the merchandise, consisting chiefly of skins, bales of cotton, and grain, accumulated in the stores there amounts to many millions of francs, and the authorities are still apparently undecided whether the whole should not be destroyed. Meanwhile, the loss to Naples from stagnation of its commerce alone must have been immense, and the consequent misery amongst the poorer classes very great. The rag-dealers, for instance, who have been prohibited from practising their calling, are in dire straits and have had to appeal to the Government for relief. On the whole, however, the situation is not regarded as very serious and the most competent authorities, such as Professor Gualdi of Rome, consider that all danger is now practically at an end. Whether this optimistic view is justified must very soon be tested by events, the incubation period of plague being comparatively short and the diagnosis, once suspicion is aroused, not difficult.

Oct. 6th.

Medical News.

SOCIETY OF APOTHECARIES OF LONDON.—At the Primary Examination the following candidates passed in the subjects indicated:—

PART I.

Biology.—J. C. Fletcher, Royal Free Hospital.
Chemistry.—H. W. Phillips, Manchester.
Materia Medica and Pharmacy.—G. C. M. Davies, Charing Cross Hospital; A. B. Gosse, Royal Free Hospital; G. H. Henry, Belfast; and P. S. Hopkins, London Hospital.

PART II.

Anatomy.—R. S. Dollard, Royal College of Surgeons in Ireland; G. H. Henry, Belfast; A. C. Jenkins, London Hospital; and J. D. Staley, Manchester.
Physiology.—H. Bennett, Manchester; R. S. Dollard, Royal College of Surgeons in Ireland; G. H. Henry, Belfast; P. J. Martin, St. Bartholomew's Hospital; J. O. Sergeant, Leeds; J. D. Staley, Manchester; D. A. Stepney, Royal Free Hospital; and R. J. S. Verity, Charing Cross Hospital.

UNIVERSITY OF DURHAM.—At the Convocation held on Sept. 28th the following degrees and diploma were conferred:—

Doctor in Medicine.—Henry Edward Davison, M.B., B.S., B.Hy. Durh.; Herbert George Harris, M.B., B.S. Durh.; Henry Douglas Johns, M.B., B.S. Durh.; Albert Ezra Neale, M.B., B.S. Durh.; Vaughan Pendred, M.B. Durh., F.R.C.S.; Arthur Riley, M.B., B.S. Durh. (*in absentia*); Frederick William Rowland, M.B., B.S. Durh.; Alfred Edward Stevens, M.B. Durh.; Ralph Harry Vincent, M.B., B.S. Durh., M.R.C.P., and Leslie Herbert Walsh, M.B., B.S. Durh.
Doctor in Medicine for Practitioners of 15 years' standing.—William Robert Etches, M.R.C.S., L.R.C.P., D.P.H.; Charles Joshua Joseph Harris, L.S.A., M.R.C.S., L.R.C.P.; John Henry Harris, M.R.C.S., L.S.A., D.P.H.; Edwin Guy Hunt, M.R.C.S., L.R.C.P.; James Thomas Neech, L.R.C.P., L.M., L.F.P.S.G., D.P.H., and William Henry Wright, M.R.C.S., L.K.Q.C.P. Irel., L.S.A.
Master in Surgery.—Bertram Crossfield Stevens, M.D., B.S., F.R.C.S. Eng., L.R.C.P., L.S.A.; and George Grey Turner, M.B., B.S. Durh., M.R.C.S., L.R.C.P.
Bachelor in Medicine (M.B.).—Curtis Crispin Adeniyi-Jones, College of Medicine, Newcastle-upon-Tyne; Arthur John Spiller Brandon, M.R.C.S., L.R.C.P., St. Thomas's Hospital; Clifford Harold Brookes, L.S.A., St. George's Hospital; Thomas Seymour Coates, College of Medicine, Newcastle-upon-Tyne; George Ernest Froggatt and Philip Gell Garrett, M.R.C.S., L.R.C.P., Middlesex Hospital; Charles Henry Gibson, College of Medicine, Newcastle-upon-Tyne; John Spencer Hall, M.R.C.S., L.R.C.P., St. Thomas's Hospital; Robert Simpson Hindmarch and Albert Ernest Hodge, College of Medicine, Newcastle-upon-Tyne; Ernest George Klumpp, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; Ernest Edward Norman and Alfred Parkin, College of Medicine, Newcastle-upon-Tyne; George Woodyatt Procter, M.R.C.S., L.R.C.P., Middlesex Hospital; Frederick Riddle Scott and John Ernest Sidgwick, College of Medicine, Newcastle-upon-Tyne; and Richard Thorne-Thorne, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital.
Bachelor in Surgery (B.S.).—Curtis Crispin Adeniyi-Jones, College of Medicine, Newcastle-upon-Tyne; Arthur John Spiller Brandon, M.R.C.S., L.R.C.P., St. Thomas's Hospital; Thomas Seymour Coates, College of Medicine, Newcastle-upon-Tyne; George Ernest Froggatt and Philip Gell Garrett, M.R.C.S., L.R.C.P., Middlesex Hospital; Charles Henry Gibson, College of Medicine, Newcastle-upon-Tyne; John Spencer Hall, M.R.C.S., L.R.C.P., St. Thomas's Hospital; Robert Simpson Hindmarch, College of Medicine, Newcastle-upon-Tyne; Ernest George Klumpp, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; Ernest Edward Norman, Alfred Parkin, Frederick Riddle Scott, and John Ernest Sidgwick, College of Medicine, Newcastle-upon-Tyne; Alfred Edward Stevens, M.B., St. Thomas's Hospital; and Richard Thorne-Thorne, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital.
Bachelor in Hygiene (B.Hy.).—Thomas Morrison Clayton, M.B., B.S. Durh.; and Thomas Yeates, M.B., C.M. Ed.
Diploma in Public Health (D.P.H.).—Thomas Morrison Clayton, M.B., B.S., B.Hy. Durh.; Henry Edward Davison, M.B., B.S., B.Hy. Durh.; Duncan Macfadyen Millar, M.B., C.M. Glasg., B.Hy. Durh.; Edgar Mitchell, M.D., B.S., B.Hy. Durh.; and Thomas Yeates, M.B., C.M. Edin., B.Hy. Durh.

UNIVERSITY OF GLASGOW.—The following have passed the first professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (B., Botany; Z., Zoology; P., Physics; and C., Chemistry):—

John Andrew Aitken (B., Z.), George Allison Allan (B.,* Z.,* P.,* C.), Robert Anderson (Z.), James Henderson Baird, B.A. (B., P.*), Edgar Barnes (B., P.), George Duncan Morrison Beaton (B.), John Charles Bosworth (C.), Donald Livingstone Carmichael (B., P.), John Paterson Carmichael (B., C.), Charles Game Angus Chislett (Z., P.), Donald Clark (B., P.), James Alexander Cowie, B.A., B.Sc. (B.), Arthur Muir Crawford (B., P.), Harold Windley Dempster (B., Z., P., C.), Robert Scott Dewar, M.A. (B.), Walter Duffy, M.A. (Z., P.), John Shaw Dunn (Z.*), Eric John Dyke (B., C.), Hamilton William Dyke (B., P.*), James Fairley (B., P.), Harry Prescot Fairlie (B., P.), Alexander Burns Ferguson (B., P.), Thomas Henderson Forrest (B., P.), James Wilfred Georgeson (B.), William Gilbert (B., P.), Joseph Glaister (C.), Alexander Graham (Z.), John Isdale Greig (B., Z.), William Grier (B., P.), Robert Neil Guthrie (B., P.), Charles Francis Dyer Hammond (P., C.), John Hammond (B., Z.), Frank Hauxwell (B., P.), Robert M'Cowan Hill (C.), Lawrence Hislop (C.), Ralph Howell (C.), Alexander Hunter (P.*), David Guthrie Hunter, M.A. (Z.), William Boyd Jack (B., P.), Arnold Ernest Jones (Z.,* C.), Percy James Kelly (B., Z.), John Keys (B., P.), James Dunlop Kidd (B., P.), James Towers Kirkland (P.), William Love Kirkwood (B., P.*), Peter Lowe, M.A., B.Sc. (B., Z.), Angus Macaulay (Z., C.), John Duncan M'Callum, M.A. (B., Z.*), John M'Cartney (B., Z.), Thomas M'Cosh (B., Z.), David MacDonald (B., P.), Duncan M'Ewan (B., P.), John Macintyre (B., P.), Finlay John Mackay (P., C.), Hugh MacNaught (B., P.), Richard Cameron Macpherson (Z., P.), Peter Maguire (B., Z., P., C.), John Miller (B., P.), William Miller (B., P.), Henry Joseph Milligan (B., P.), Robert Wright Mitchell (B., P.), John Moffatt (Z.), Kenneth Morrison (P., C.), Arthur Geoghegan Paxton (B., P.), Thomas Thomson Rankin (B., P.*), Daniel M'Kinlay Reid (B.), James Mill Renton (B., P.*), Arthur Robertson (B., P.*), James Henry Anderson Robertson (B.), William Rolland (Z.,* C.), Alexander Cappie Russell (B.* P.), John Cooper Russell, M.A. (B., C.), James Charles Donaldson Simpson (P., C.*), Robert Alexander Slater (Z.), Thomas Baillie Smith (B., P.), Arthur Anderson Stewart (P., C.), Daniel Stewart (B., P., C.), John Logan Stewart, M.A. (B.,* Z., P.,* C.), Thomas Strain (B., Z., C.), William Alexander Stuart (B., P.), Joseph Roderick Sutherland (B.,* P.*), William Robb Taylor (B., C.), Thomas Thom (B., P.), Charles Samson Thomson (B., P.), Robert Todd (B., P.), William Young Turner, M.A. (B., Z.), James Kennedy Welsh (Z.*), and George Young (B., P.). Women.—Bethia Shanks Alexander (P.), Jeannie Thomson Clark (B., Z.), Annie Rennie Hird (B., Z.), Rose Isobel Hudson (B., Z.), Katharine Robina Margaret Lucas (P.), Agnes M'Phun (C.), Elizabeth Maud M'Vail (B., Z.), Margaret Walker Millar (P., C.), Edith Oversby (B.), Vera Dagmar Reis (B., Z.), Lily Smellie (P.), and Margaret Baillie Taylor (B., Z., P.).

The following have passed the second professional examination in the subjects indicated (A., Anatomy; P., Physiology; and M., Materia Medica and Therapeutics):—

Robert Adam (M.*), Adolph Anderson (P.), James Richard Sunner Anderson (P., M.), Thomas Bennett, M.A. (M.), Archibald Grainger Bisset (A., P.), Alexander Blair (A.), Robert George Bradford (P., M.), John Brown (P.), Carl Hamilton Browning (A., P.,* M.*), John Miller Hopkins Caldwell (A.), Andrew Connal (A., P., M.), John Cross (A.), Hugh Collin Davies (A., M.), David Dickie (M.), James Forsyth (A., P., M.), William Macmillan Gilmour (P., M.), James Glover (A., P.), George Gordon (P.), John Hanson, M.A. (A., P., M.), Saul Hyman Harris (M.), William Harvey (M.), John Monnette Huey (A., P.), Malcolm Hutton, M.A. (A., P., M.), Alexander Jamieson (P., M.), John Muir Kelly (A.), Alexander Dingwall Kennedy (A., M.), Robert Dallas Kennedy (P.), Alexander Leggat (P.), Archibald Leitch (A.), William Jamieson Logie (P.), Thomas Walker Love (M.*), Donald Macaulay (A., P.), John Bertram M'Cabe (P., M.), John Finlay Macdonald (A., P.), David Duncan Fraser Macintyre (P.), Norman Alexander Macleod (A., P., M.), Andrew Alexander M'Whan (P.), Alexander Matheson, M.A., B.Sc. (M.), John Baird Morton (A.,* P., M.), Gavin Muir (A.), James Carmichael Pairman, M.A. (A.,* P.,* M.), Daniel Stevenson Richmond (P., M.), George Richmond (A., P., M.), Peter Hamilton Robertson (M.), Robert Thin Craig Robertson (M.), Campbell Ross (A., P.), Lawrence Drew Shaw (P.), John Macgregor Smith (P., M.*), John Black Stevenson (M.*), Wm. David Henderson Stevenson, M.A. (M.), John Stewart (A., M.), Norman Burgess Stewart (A., P.), William Stewart (M.), Peter Lindsay Sutherland (M.*), Joseph Walker, M.A. (M.), Alexander Macmillan Watson (M.), Robert Watson (P.), William Norman West Watson (M.*), Griffith John Williams (M.), Archibald Simpson Wilson (A.), Robert M'Nair Wilson (A., P.*), Eldred Wright (A.), Hugh Young (M.), and John Young, Glasgow (M.). Women—Jeanie Auld (M.), Agnes Wallace Cameron (M.), Mary Charlotte Cameron (M.), Jane Campbell (A.), Jessie Galloway Duncan (M.), Kate Fraser, B.Sc. (M.), Jane Reid Foulds Gilmour (M.), Margaret Hardy (M.), Mary Lauchline M'Neill (M.), Anna Pollock Martin (A.), Eliza Jane Miller (M.), Isabel Deane Mitchell (M.), Margaret Hassock Smart (M.), Jessie Marie Stewart (M.), and Janet Gardner Waddell (M.).

The following have passed the Third Professional Examination in the subjects indicated (P., Pathology; and M., Medical Jurisprudence and Public Health):—

William Armitage (P.), Robert James Arthur (P., M.), Robert Bryson (P.), Angus Campbell (P., M.), Robert Harold Campbell (P., M.), Alexander Adam Carruthers (M.), Robert Peploe Cartwright (M.), John Cairns Christie, M.A. (P., M.), Samuel Campbell Cowan (P., M.), James Craig (P., M.), James Dick, M.A. (P., M.), Mitchell Innes Dick (M.), Donald Douglas, M.A. (M.), William Dow (M.), William White George (P., M.), John Andrew Hagerty (M.), John Kennedy (P.), Daniel Douglas M'Dougall, M.A. (M.), Alexander Armstrong MacFarlane (P., M.), John Matheson Mackellar (M.), Ivy M'Kenzie, M.A., B.Sc. (P., M.), James Roy M'Vail (P., M.), Robert Harry Manson (P.), Robert Menzies (M.), Alexander John Mitchell (P., M.), John Mark Reid (M.), Norman Cumming Rogers (M.), James Russell (P.), Frank Donald Scott (M.), John Barbour Stewart (P., M.), John Restell Thomas (M.), John Forrest Weston (M.), Joseph White, M.A., B.Sc. (P., M.), and John Wilson (P.). Women—Helen Stephen Baird, B.A. (M.), Gertrude Dorman Bostock, B.Sc. (P.,* M.), Margaret Edith Bryson (P., M.), Ethel MacLeod Lochhead (P., M.), and Edith Christine Wallace (P., M.).

* With distinction.

POISONOUS FUNGI.—An inquest was held at Plymouth on Sept. 30th upon a man, aged 42 years, who was taken ill after eating some "mushrooms" purchased from a hawker on Sept. 21st. He died on Sept. 29th. His wife, who had also partaken of the same food, felt no ill-effects. Medical evidence showed that death was due to poisoning by eating fungi which resembled mushrooms, and a verdict of "Death through misadventure" was returned.

HOSPITAL SATURDAY FUND.—The quarterly meeting of the board of delegates of the Metropolitan Hospital Saturday Fund was held on Oct. 5th at the offices of the Fund, 54, Gray's Inn-road, W.C. The report of the finance committee showed that the receipts from the workshops, &c., from Jan. 8th to Sept. 14th had amounted to £9865 12*s.* 8*d.*, as compared with £9128 6*s.* 5*d.* at the corresponding period of last year. The expenditure since January had reached £1343 5*s.* 10*d.* The sum of £6000 had been placed on deposit at the bankers, and £3134 16*s.* 1*d.* had been advanced to the premises fund. For the twenty-ninth consecutive year Hospital Saturday will be observed in London and the suburbs on Saturday, Oct. 12th. The regular weekly collection in the industrial establishments, which will be continued until the end of December, at the present time amounts to nearly £1000 in advance of the sum contributed at a corresponding period of last year.

A CHARGE OF FRAUD.—The *Times* of Oct. 8th reports that at Marylebone W. Dyer Frazer, 44 years of age, *alias* Robert Wilson and Sergeant Bertram, described as a surgeon, was charged, on remand, with attempting to obtain charitable contributions from Dr. Theodore D. Acland of Bryanston-square and others by false pretences. It appeared that on July 9th Dr. Acland received a begging letter purporting to come from Mr. W. Dyer Frazer, one of his old pupils at St. Thomas's Hospital, who is now in Johannesburg. The letter was dated from a street at Brighton. Dr. Acland communicated with the secretary of the Medical School at St. Thomas's Hospital and then wrote to Mr. H. C. Crouch of Welbeck-street, Mr. Frazer's brother-in-law. Mr. Crouch immediately recognised the letter as being similar to others received from several other medical men, including Sir William MacCormac, which had been sent on to him, and, knowing that they were not in his brother-in-law's handwriting he communicated with the police. A further charge was now preferred against the prisoner of forging the endorsement of a cheque for £10 and uttering the same, thereby defrauding Mr. J. F. Churchill, of Chesham. Mr. Travers Humphreys, barrister, prosecuted for the Medical Defence Union. Mr. Churchill stated that at one time he was a student at Charing-cross Hospital. On March 21st he received the following letter purporting to be signed by Walter H. Haw, M.R.C.S., L.S.A.:—"Private. Dear Sir,—Under the following very special and exceptional circumstances I beg to solicit, as an old Charing-cross man and ex-H.P., your most kindly offices. I have been in practice in Barberton in the Transvaal, South Africa, and on the outbreak of the war had to decide between losing my all or taking up arms for the Boers. I chose the former alternative, with the result that I have returned here, Air-street, Brighton, penniless and in the greatest straits. To enhance my trials I have a wife and child to support. I am now trying to obtain some help from a benevolent institution, B.M.A. Will you as an act of truest kindness support my appeal? And can you extend me help in any other way? Awaiting your kind reply, I am, Sir, yours truly," and signed as above. The witness wrote asking for references and was referred to two medical men, living at Northampton and Welwyn, who were described as colleagues of the writer at Charing-cross. The witness wrote to these gentlemen and, believing the writer of the letter was the person he represented himself to be, he sent a cheque for £10, which was duly paid by the bank and endorsed "Walter H. Haw." Subsequently, he received other letters from the same person, and at length he wrote to Mr. W. H. Haw at Barberton, and in consequence of his reply he communicated with the Medical Defence Union. Mr. Humphreys said that one of the subsequent letters had a deep black edge and asked for a further £10 as the writer's "dear wife" was dead. Other witnesses were called to show that the prisoner arranged with a newsagent at Air-street, Brighton, to receive letters in the name of Haw. A great many letters were received in that name, and these were given to a woman who took them to the prisoner. This woman had known the prisoner for two years. He had been in England during that time and had neither wife nor children. The prisoner was arrested by Detective-sergeant Harris in the hop-fields at Yalding in Kent. He admitted that he sent the letter, the subject of the first charge, and in regard to the other said that the letters and the endorsement on the cheque were in his handwriting. The detective informed the court that there were eight other similar cases, but the persons concerned would not prosecute. Mr. Plowden committed the prisoner for trial.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—Dr. T. B. Adam has just been appointed assistant secretary of the British Medical Temperance Association, which now numbers more than 1000 members and student associates. Dr. Adam's address will be that of the honorary secretary, Dr. J. J. Ridge, Carlton House, Enfield, and he will specially devote himself to work among medical students.

MR. J. LYNN THOMAS, C.B., F.R.C.S. Eng., L.R.C.P. Lond.—At the meeting of the committee of the Cardiff Infirmary held on Oct. 2nd, a resolution was passed expressing the heartiest congratulations of the committee to Mr. J. Lynn Thomas on his being appointed a Companion of the Order of the Bath, a distinction awarded to him in recognition of his services in South Africa.

VACCINATION QUESTIONS.—At a meeting of the Helston Board of Guardians held on Sept. 28th a letter was read from the Local Government Board drawing attention to the unsatisfactory state of vaccination in one of the parishes of the union, and requesting the guardians to inform the public vaccinator that if he did not perform his duties another must be appointed to do so. The guardians eventually decided to write to the public vaccinator complained of, the assistant clerk remarking that unless the board of guardians did their duty by dealing with defaulters they could hardly expect the public vaccinators and vaccination officers to do theirs.

FATAL ACCIDENT TO A MEDICAL MAN.—An inquest was held at Chippenham on Oct. 4th concerning the death of Dr. David Reid Crow, whose body was found lying on the Great Western Railway line near Chippenham. Evidence showed that Dr. Crow had taken a ticket from Plymouth to Paddington on Oct. 2nd and at Chippenham the door of the railway-carriage in which he journeyed was found open. Medical evidence showed that the neck was fractured and a verdict of "Accidental death" was returned. Dr. Crow, who was a native of Ardrishaig, Argyllshire, was 32 years of age and was unmarried. He studied medicine at Edinburgh University, graduating M.B. and C.M. in 1893. For a few years afterwards he practised in Barnes, near London, until last year he accepted a Government appointment in West Africa. Whilst at Kumasi he contracted malarial fever and had only just returned on leave to England.

EPSOM COLLEGE.—At a meeting of the Council of Epsom College held on Oct. 2nd, when the Rev. E. W. Northey occupied the chair, a silver tea and coffee service was presented to the Rev. Dr. Rowton, as a personal testimonial from the members of the Council, all of whom had contributed towards its purchase. The following inscription appeared on the tea and coffee pots:—"Presented to the Rev. S. J. Rowton, M.A., Mus. D., by the members of the Council of Epsom College, in recognition of his devotion to the best interests of the School during thirty years. July, 1901." In presenting the testimonial the chairman referred in cordial terms to the long period during which Dr. Rowton had been connected with the College and to his valuable and varied services to the school. He observed that the pleasure of the Council in making the presentation was linked with regret at the loss of so valued a teacher. On behalf of his colleagues and of himself he expressed the hope that health and happiness would attend Dr. Rowton and his family in their new home. Dr. Rowton replied in happy terms, expressing his most hearty thanks to the Council for their recognition of his work.

ENTRANCE SCHOLARSHIPS.—At King's College Hospital the following Entrance Scholarships have been awarded:—Medical Entrance Scholarships: P. A. Mansfied, 70 guineas; W. Hart, 60 guineas. Sambrooke Medical Exhibition (Science): F. C. H. Powell, £60. Clothworkers' Company Exhibitions (Science): N. G. Langrish, £30 for two years; G. W. N. Rose, £20 for two years. Warneford Medical Scholarships (Arts): H. L. Gauntlett, £25 for three years; C. A. Narlian, £25 for three years. Epsom Scholarship: J. L. Burford, £135.—The following awards have been made in the Faculty of Medicine at University College, London:—Medical Entrance Scholarships—Bucknill Scholarship, £30 a year for four years, J. A. Watt; 60 guineas

Scholarship, H. R. Evans; 60 guineas Scholarship, L. F. Hirst. Medical Exhibitions, each 80 guineas, J. A. Ferrière and E. E. Maples.—At the Westminster Hospital Medical School the entrance scholarships competed for before the beginning of the winter session have been awarded as follows:—Epsom Scholarship, of the value of 110 guineas, J. M. Platt; Scholarship in Arts, of the value of £60, R. S. Statham, Dover College; Natural Science Scholarship, of the value of £60, A. C. Bryson; University Scholarship, of the value of £40, J. H. Hebb, St. John's College, Oxford; Scholarship in Arts, of the value of £40, H. Galloway, St. Paul's School; and a Scholarship in Arts, of the value of £30, C. C. Hickey.

WATER-SUPPLY OF PADSTOW.—The Local Government Board inspector recently held an inquiry at Padstow, Cornwall, into the application of the urban district council for leave to borrow £4535 for the purpose of a water-supply for this seaside resort.

DEATHS OF CENTENARIANS.—Mrs. Spurway died at Barnstaple last week at the age of 101 years and five months.—The death is announced of Madame Thiollier, aged 103 years, at Lombrenil. She has left 92 children and grandchildren.

CHARITABLE BEQUESTS.—By the will of the late Mr. Robert Currie Murray, of Kirkconnel Lea, Sydenham-road, Bristol, the Royal Infirmary at Dumfries receives £500, Mr. Barnardo's Homes £300, and the Royal Infirmary at Bristol, the Bristol General Hospital, the Bristol Dispensary, and the Children's Hospital at Bristol £100 each.

A NEW HOSPITAL FOR WHITBY.—On Sept. 28th Lady Cecilia Turton opened the new permanent Cottage Hospital erected in Grape-lane, Whitby, which occupies the site of the old premises of the York Union Bank. The new building has cost about £1100, towards which sum £300 are still required. The hospital has been fitted with the latest modern improvements. It may be of interest to note that Captain Cook, the circumnavigator, lived next door to the present building.

BRISTOL GENERAL HOSPITAL.—A special general meeting of the governors of this institution was held on Oct. 7th, when Dr. George Parker was appointed physician to the hospital, vice Dr. Alfred James Harrison, resigned. Dr. Harrison was appointed physician in charge of the skin department of the hospital. There were three candidates for the post of assistant physician vacant by the resignation of Dr. Parker, and Dr. Newman Neild was eventually elected.

FREEMASONRY.—*The Rahere Lodge, No. 2546.*—A meeting of this lodge was held on Oct. 8th at Frascati's Restaurant, Oxford-street, London, W. Bro. Phineas S. Abraham, M.D., W.M., being in the chair. Bro. Whitaker was admitted to the third degree and Bros. Keown and Scott to the second degree. Mr. Arthur J. Edge, M.B. Lond., was initiated into Freemasonry and Bro. T. B. Carlyon, M.R.C.S. Eng., St. George's Lodge, No. 125, was unanimously elected a member of the lodge. The brethren and a number of guests afterwards dined together.

ADDED MILK IN BUTTER.—In THE LANCET of Sept. 21st, p. 779, it was mentioned that Messrs. Pearks, Gunston, and Tee, grocers, had been condemned in three different places to pay fines and costs amounting to £60 for selling butter containing more than 16 per cent. of moisture. The same defendants having been recently summoned before the Taunton borough justices for a like offence—namely, the sale of butter re-churned with milk—the bench dismissed the summons, on the ground that the label was sufficiently descriptive and that there had been no sale to the prejudice of the purchaser.

THE NATIONAL REGISTRATION OF PLUMBERS.—The Mayor of Tunbridge Wells (Alderman W. H. Delves) presented certificates of registration to master and operative plumbers at a meeting at the Town Hall, Tunbridge Wells, on Oct. 3rd. He was supported by Alderman Lutwidge, Alderman Cronk, and other members of the corporation, who expressed their sense of the need for the national registration of plumbers in the public interest.—Mr. W. H. Bishop, who represented the Plumbers' Company, sketched the origin of the movement, the resolve of the craft to insure respect for plumbing work, the demands for registration that came from all sides, the formation and constitution of registration committees, the gradual growth in them of tests in practical work, the importance of practical tests, and the appreciation of the craft shown by adhesions equal to over one-third of the plumbers of the United Kingdom to a voluntary association exercising authority to which they declared allegiance. He described the importance attached by plumbers to an Act of Parliament which would put difficulties in the way of those who were not registered but pretended that they were, and glanced at the opposition made by interested parties. He praised the intelligence of those who from the desire to see plumbing work well done had supported the registration movement, suggesting that if one in 10 might be taken to represent the really intelligent men in any great trade plumbers (registering over one-third of the whole) might claim that their intelligent members of the craft were as one in three, a much larger proportion.—Mr. A. Markins, an operative plumber, expressed the hope that in the new technical institute provision would be made for practical as well as theoretical classes.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

BARR, J., M.B., M.S. Glasg., has been re-appointed Medical Officer of Health of the Urban District of Rishton.

BONNEY, W. F. VICTOR, M.D., M.S. Lond., F.R.C.S. Eng., has been appointed Physician to Out-patients, Chelsea Hospital for Women.

BYFORD, W. F., M.R.C.S. Eng., L.R.C.P. Lond., has been re-appointed Medical Officer of Health of the Borough of Ruthin.

COLLARD, F. S., F.R.C.S., L.R.C.P. Lond., has been appointed Certifying Surgeon under the Factory Acts for the Croydon District of Surrey.

COLLINS, EDWARD TENISON, M.R.C.S., L.S.A., has been appointed Honorary Gynæcologist to the Cardiff Infirmary.

COUTTS, F. J. H., M.D. Vict., D.P.H., has been appointed Medical Officer of Health of the Borough of Blackpool.

DOBBS, K. D. B., L.R.C.P., L.R.C.S. Irel., has been re-appointed Medical Officer of Health of Tutbury.

GRIFFITHS, A. F., M.D. Harvard, has been appointed Clinical Assistant, Chelsea Hospital for Women.

HAY, JOHN, M.D. Vict., M.R.C.S. Eng., L.R.C.P. Lond., has been re-appointed Medical Tutor and Registrar to the Royal Infirmary, Liverpool.

HILL, ERNEST, L.R.C.P. Lond., M.R.C.S., D.P.H., has been appointed Health Officer for the Colony of Natal.

KELLY, BRUCE, M.B., C.M. Edin., L.R.C.P. Lond., M.R.C.S., has been appointed Deputy Medical Officer by the Wells (Somerset) Board of Guardians.

LAMB, J. M. A., L.S.A. Lond., has been appointed Medical Officer and Public Vaccinator for the Second District, Poole Union.

LEHMANN, J. E., M.B. Toronto, L.R.C.P., M.R.C.S., has been appointed Assistant Surgeon to the German Hospital, London.

MARSHALL, LEGH-RICHMOND, L.S.A. Lond., has been appointed Medical Officer and Public Vaccinator to the Mary Tavy District of the Tavistock Union.

MATTHEWS, J. F., M.R.C.S. Eng., has been appointed Public Vaccinator for the South-Western District, Victoria.

MCCALL, EVA, M.B., B.S. Glasg., has been appointed Resident Medical Officer at the Birkenhead Union Infirmary.

MCCARDEL, E. J., M.D., Ch.M., M.R.C.S. Eng., has been appointed Clinical Assistant, Chelsea Hospital for Women.

MONTGOMERY, SAMUEL, L.R.C.P., L.R.C.S. Edin., has been appointed District Medical Officer and Public Vaccinator to the Branksome District, Poole Union.

MURRAY, A. H., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer at Cunnamulla, Queensland.

PRINGLE, ARTHUR Y., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Honorary Medical and Surgical Officer to the East Suffolk and Ipswich Hospital.

SHERREN, JAMES, F.R.C.S. Eng., has been appointed Surgical Registrar to the London Hospital.

TURNER, A. H., L.S.A., has been appointed Medical Officer and Public Vaccinator of the Beaconsfield District of the Amersham Union.

VON MURALT, WILLY, M.D. Zürich, has been appointed Clinical Assistant, Chelsea Hospital for Women.

WADDINGTON, W. HEYWOOD, M.B. Vict., L.S.A., has been appointed Medical Officer of Health for Scarborough.

WHITEHOUSE, W. H., M.D. Durh., D.P.H., has been appointed Honorary Medical Officer to the Birmingham Lying-in Charity, vice Mr. Clement Hadley.

WILLIAMS, LEONARD, M.D. Glasg., has been appointed Assistant Physician to the German Hospital, London.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon, unmarried. Salary £150 per annum, with rooms, fire, lights, and attendance.
BRADFORD ROYAL INFIRMARY.—House Surgeon, unmarried. Salary £110 per annum, with board and residence. Also Dispensary Surgeon, unmarried. Salary £100 per annum, with board and residence.
BRISTOL GENERAL HOSPITAL.—Assistant House Surgeon. Salary £70 per annum, with board, residence, &c.
CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY, Sloane-square, Chelsea, S.W.—Honorary Surgeon.
CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Registrar. Honorarium 20 guineas per annum.
CITY ASYLUM, Birmingham.—Junior Assistant Medical Officer, unmarried. Salary £150 a year, with board, apartments, and washing.
CORNWALL COUNTY ASYLUM, Bodmin.—Junior Assistant Medical Officer, unmarried. Salary £120, rising to £150, with board, apartments, laundry, &c.
COUNTY ASYLUM, Mickleover, Derby.—Junior Assistant Medical Officer. Salary £110, rising to £130 per annum, with apartments, board, washing, and attendance.
DENBIGHSHIRE INFIRMARY, Denbigh.—House Surgeon. Salary £100, with board, residence, and washing.
ESSEX COUNTY ASYLUM, Brentwood.—Junior Assistant Medical Officer. Salary £140 per annum.
GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Surgeon.
GUY'S HOSPITAL MEDICAL SCHOOL.—Gordon Lectureship in Experimental Pathology. Salary, with fees, £250 per annum.
HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London, W.C.—House Surgeon, unmarried, for six months. Salary £20, washing allowance £2 10s., with board and residence; also Surgeon Dentist.
HOSPITAL FOR WOMEN, Liverpool.—House Surgeon for six months. Honorarium £25.
HUDDERSFIELD INFIRMARY.—Junior House Surgeon. Salary £80 per annum, with board, residence, and washing.
HOSPITAL FOR WOMEN, Soho-square, W.—Assistant Physician.
INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Senior House Surgeon. Salary £100 per annum, with residence, board, and washing.
MANCHESTER MONSALL FEVER HOSPITAL.—First Medical Officer. Salary £150 per annum, with board and lodging.
MIDDLESEX HOSPITAL, W.—Honorary Physician.
MORPETH DISPENSARY.—House Surgeon, unmarried. Salary £120 per annum, with rooms, coals, gas, and attendance.
PADDINGTON GREEN CHILDREN'S HOSPITAL, London, W.—House Physician, also House Surgeon, both for six months. Salary at rate of 50 guineas a year, with board and residence.
PLYMOUTH BOROUGH ASYLUM.—Assistant Medical Officer, unmarried. Salary £150 per annum, rising to £200, with apartments, board, and washing.
ROYAL CORNWALL INFIRMARY.—House Surgeon, unmarried. Salary £100, increasing by £10 a year, with board and apartments.
ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Ventnor.—Resident Medical Officer, unmarried. Salary £150 per annum, with board and lodging.
ROYAL SEA BATHING HOSPITAL, Margate.—Honorary Visiting Surgeon.
ROYAL VICTORIA HOSPITAL, Belfast.—Medical Superintendent. Salary £300 per annum, with board and apartments.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, West Strand, W.C.—Assistant Surgeon.
SUSSEX COUNTY HOSPITAL.—House Physician, unmarried. Salary £80 per annum, with board, residence, &c.
WESTBOURNE PROVIDENT DISPENSARY, 244, Harrow-road, Paddington.—Medical Practitioner.
WEST RIDING ASYLUM, Wakefield.—Locum Tenens for three months from Nov. 1st next. Salary £3 3s. a week, with apartments and board.
YORK COUNTY HOSPITAL.—House Surgeon. Salary £100 per annum, with board, residence, and washing.
YORK DISPENSARY.—Resident Medical Officer, unmarried. Salary £110 a year, with board, lodging, and attendance.

The Chief Inspector of Factories, Home Office, London, S.W., gives notice of vacancies for Certifying Surgeons under the Factory Acts at Foyers, Invernesshire; at Shilton, Warwickshire; at Wells, Norfolk; and at Sherston, Wiltshire.

Births, Marriages, and Deaths.

BIRTHS.

FOULDS.—On Oct. 8th, at Ashlea, Droitwich, the wife of Francis H. Foulds, M.R.C.S., L.R.C.P. Lond., of a daughter.
TINLEY.—At Hildegard House, Whitby, Sept. 8th, the wife of W. E. F. Tinley, M.D., twin daughters.

DEATHS.

SMITH.—On Oct. 1st, at Machadodorp, Transvaal, of dysentery, Hugh Beaumont Smith, M.B., B.Ch., B.A.O. Irel., Civil Surgeon, aged 25.
THOMSON.—On Oct. 6th, at Beechhurst, Camberley, Surrey, Surgeon-Major-General William Arthur Thomson, Honorary Physician to the King, aged 71.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

ALLEGED WANT OF SKILL NO ANSWER TO A CLAIM FOR ATTENDANCE.

AT the Southwark County Court on Tuesday, Oct. 1st, before his Honour Judge Addison, K.C., Dr. James Wills, of 232, Old Kent-road, sued Joseph Payne, to recover £10 9s. for professional attendance on, and medicine supplied to, Mrs. Payne.—Mr. Philcox, solicitor, appeared for the plaintiff.—Dr. Wills said that he attended Mrs. Payne during seven months, paying her 32 visits, making two special examinations, one operation which occupied two hours and in connexion with which he paid another medical gentleman £1 1s. for administering chloroform, and supplying 32 bottles of medicine, 11 bottles of lotion, powders, &c. He sent in his bill for £10 9s., which was a reasonable charge, and no complaint was made until the present summons was issued.—The Defendant declared that all that this bill covered was done by the medical practitioner to rectify an error he made when his wife was first confined.—The Plaintiff: That was two years ago, and she has been confined by another doctor since. She came back to me after that.—The Defendant: The doctor who attended at the second confinement found out the injury done at the first.—His Honour: As there is no counter claim against the doctor for want of skill that is no answer to this action. It is rather hard on the doctor to suggest want of skill after all this long time and after another confinement by another medical man. But why did you come back to Dr. Wills after he had, as you suggest, done wrong?—The Defendant: Because of what the doctor told me at the second confinement. She has had to undergo an operation and cannot come to-day.—His Honour: The suggestion of want of skill is no answer to this bill. That would be matter for a cross action or a counter claim, but it would be a very difficult thing to prove. I am not in the least inclined to suggest such an action, because I know of no class of case which is more expensive or troublesome or difficult of proof than negligence against a medical man after such a lapse of time.—Dr. Wills: I was accompanied by another medical man, and we gave her chloroform as it was a very difficult case, but she got perfectly well.—The Defendant: The doctor used instruments against my wish.—His Honour: That is no answer to this bill.—The Defendant: Will you adjourn the case until my wife is able to attend?—His Honour: I should do you no earthly good by adjourning this; it would only pile up costs against you and waste the time of the doctor. I cannot allow that. If you have a grievance against the doctor you must bring an action against him. At present he is entitled to this amount, and therefore I give judgment for him for the amount claimed and costs.—Judgment was entered accordingly.

A POINT IN VACCINATION LAW.

To the Editors of THE LANCET.

SIRS,—I shall be much obliged if you will kindly answer in the next number of THE LANCET what I am going to ask you. I am a public vaccinator and sent a notice to the father of a child saying I would call and offer to vaccinate, &c. By return of post I received a letter from the father containing his address, signed with his full name, and saying "it will be no use you visiting the home of —— [giving his child's name] *for I will not have her vaccinated*," the words in italics just as I have written them. The man is a farmer, in a good position, and not being my patient I did not call at the house. I want to know if, in the face of the father's decided refusal of vaccination, it is necessary for me to visit the house in order to render successful any proceedings taken against the father of the child by the vaccination officer. I am, Sirs, yours faithfully,

Oct. 3rd, 1901. BOOTE.

*** Yes, it is necessary.—ED. L.

A LEGAL QUERY.

JUDICIAL ignorance is proverbial, but legal ignorance is, if we may judge by the following story, not confined to the bench. A lady applied through her solicitors to an insurance office for insurance on her life. The office replied to the solicitors that they could not entertain the proposal to insure Mrs. —— "on account of her menopause not being yet established." The solicitors thereupon wrote back to the office:—

"Gentlemen,—What is a menopause? and what steps, if any, would you recommend us to advise Mrs. —— with a view to getting her menopause established or filed?"

*** This letter was type-written, with the exception of the last two words, which were in ink.—ED. L.

THE WATER-FAMINE IN THE NORTH.

THE *Batley Reporter* of Oct. 4th attributes to the medical officer of health of Batley the following statement: "The dark colour of the water at Batley just now will do nobody any harm. He had tested the water and found it perfectly free from any signs of decomposition. 'Boiling and filtering might suit sentimentalists, but it spoiled the water and there was no need for it.'

We do not know the state of the water at Batley, and possibly the medical officer of health is correct in saying that the public might drink it with impunity, but to make such a general statement as he is reputed to have done is certainly to expose himself to criticism. Under certain circumstances not to boil the water would be to court a great danger in drinking it, and if the water at Batley is dark-coloured the term "sentimentalists" can certainly not be applied to those who would take the very wise precaution of filtering and perhaps of boiling it also before drinking it. Certain fevers have been proved to be waterborne, but boiling destroys the germs and renders the water fit for drinking purposes as far as disease germs are concerned.

DOMEN STRAIGHT-FRONTED BELT CORSET.

THE Domen Belt Co., of 406, Strand, London, W.C., have submitted to us their straight-fronted belt corset, which they have designed with a view to the avoidance of compression in the epigastric and umbilical region and which they state will especially meet the requirements of those suffering from certain abdominal troubles. The combination of corset and belt is well designed and is a great advance on the separate articles usually employed. The elasticity of the straight-fronted belt corset goes a long way towards reducing the possibility of too tight-lacing and it is pronounced to be very comfortable.

"HIGH FREQUENCY CURRENTS AND DIABETES."

To the Editors of THE LANCET.

SIRS,—In reply to your correspondent "S. L. B. W." *re* High Frequency Currents and Diabetes in THE LANCET of Oct. 5th we have record of an exceedingly interesting case treated by high frequency currents as employed here. The patient was a chief engineer in the American Navy at Santiago. The sugar in his urine was reduced very greatly, almost to vanishing point, his weight increased, and his general health was completely restored. We shall be pleased to send you detailed particulars if favoured with an application from your correspondent. I am, Sirs, yours faithfully,

JOHN D. MARSHALL.

he Electrical Ozone and Light Treatment, Hanover-square, W.,
Oct. 7th, 1901.

To the Editors of THE LANCET.

SIRS,—The following references may assist "S. L. B. W.":—Bordier (Précis d'Electrothérapie, p. 532), abstract: "Results not conclusive, Messrs. Apostoli and Berlioz have in three cases seen the sugar disappear almost completely; treatment by auto-conduction. When the sugar has not diminished there has been a marked improvement in the general state. Owing to the different causes uniform results cannot be expected. However, the treatment ought to be tried in all cases if only for the improvement in the general state." Gaimball (La Thérapeutique par les Agents Physiques, p. 517) has submitted several cases to auto-conduction without any result. There is, so far as I can see, no mention of the treatment of diabetes by high frequency currents in the Comptes Rendus des Séances du 1er Congrès International d'Électrologie et de Radiologie Médicales, Paris, 1900.

I am, Sirs, yours faithfully,

Oct. 8th, 1901. J. DODD.

To the Editors of THE LANCET.

SIRS,—In answer to "S. L. B. W." *re* the value of high frequency electrical currents in the treatment of diabetes mellitus I beg to state that I have treated five cases. Four, very slight and early cases, lost all sugar and symptoms in a few weeks' treatment. The fifth case is a very old one and the weight improves and sugar goes quickly under treatment only to return after an interval of a few months. The patient is now under treatment for the third time and is gradually improving. I hope to be able to report these cases later. High frequency and high potential electrical currents are of the greatest use in *all* conditions of "wasting." I am, Sirs, your faithfully,

Oct. 7th, 1901. C. W.

"A DIFFICULTY UNDER THE NOTIFICATION ACT."

To the Editors of THE LANCET.

SIRS,—Under the above heading of proceedings against me by the Lunesdale Rural District Council, reported in your issue of Oct. 5th, is a mistake which might easily occur by a confusion of names. It is made to appear that I conducted the cross-examination of my opponent's medical witness, at the end of which it says, "Dr. Wingate-Saul submitted there was no case to answer," &c., &c., and, further, "Dr. Wingate-Saul's application for costs was refused," &c., &c.—whereas I never spoke in court, my case having been conducted by my son, Mr. E. W. Wingate-Saul, barrister-at-law, instructed by a firm of Lancaster solicitors. If you will kindly make this correction in your next issue I shall be obliged.

I am, Sirs, yours faithfully,

Oct. 6th, 1901. W. W. WINGATE-SAUL.

A QUESTION OF ORTHOGRAPHY.

To the Editors of THE LANCET.

SIRS—On reading the "Suggestions for the Care and Use of Paraffin Lamps" issued by the Education Department I noticed, as probably others have done, that the eighth paragraph is as follows: "Never refil (*sic*) the lamp when it is alight." Turning to page 928 of THE LANCET of Oct. 5th, where you reprint the somewhat lengthy document which is to puzzle or instruct the young mind and lead to the puzzling or instruction of the parent corrected by the offspring, I found, without surprise, that in the injunction referred to you print "refil" as "re-fill." I confess myself to be on the side of your proof-reader or whoever corrected (as I believe) the spelling of the Education Department, and I may point out that you have on your side practically all the dictionaries, even the "Century Dictionary" which hails from across the Atlantic and would justify the Education Department if it sought to make its pupils spell "theatre" "theater," giving "refil" without an alternative spelling with one l. Johnson, however, and the "New Oxford Dictionary" alike give "fulfil" in preference to "fulfill" without excluding the latter, and I take it that the gentleman who drafted the lamp circular followed the analogy of "fulfil" either intentionally or unconsciously. I should rather like to know, however, what spelling will be adopted by schoolmasters and school inspectors who may strive to impress the circular on scholars by giving it to them as dictation, and what view would be taken by Civil Service examiners in those examinations for posts in Government offices and the services in which mistakes of spelling are jealously scrutinised and counted. "Refil," at any rate, cannot have been a misprint; it catches the eye too readily for successive readers to miss it—and I suppose that someone reads the circulars issued by Government departments after they leave the printers.

I am, Sirs, yours faithfully,

Oct. 9th, 1901. M.A. CANTAB.

HOW DISEASE IS SPREAD.

A CASE of scarlet fever was recently reported to the medical officer of health of Leeds, who found that the patient, as soon as he knew the nature of the disease, had travelled to Southampton. The Leeds authorities communicated with the sanitary department of that port and the man has been summoned before a court of summary jurisdiction and fined 40s. and costs for appearing in a public place while suffering from scarlet fever. It is a pity that a greater penalty than this could not be meted out to persons who thus jeopardise the health and perhaps the life of their fellow-creatures.

SHORTHAND FOR MEDICAL STUDENTS AND PRACTITIONERS.

AMONG the students who have just commenced their medical studies there are probably some who are acquainted with shorthand, having learnt it at school. The attention of such students is specially invited to the Society of Medical Phonographers. The object of this society is to increase the practical service of shorthand to its members by publishing a monthly periodical and other shorthand medical works. Also, any medical practitioners who use shorthand and have not yet joined the society are cordially invited to do so. No skill in shorthand is necessary for membership. The annual subscription for students is 5*s.*, for practitioners 7*s.* 6*d.* A detailed prospectus of the society will be sent on application to the honorary secretary, Dr. Fletcher Beach, 79, Wimpole-street, W.

Uncertain.—If our correspondent took the degree of M.B. London subsequently to 1887 there is no doubt that as far as qualification is concerned he is eligible for the post he mentions.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (14th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.) West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (15th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.).

WEDNESDAY (16th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.), Throat, Golden-square (9.30 A.M.).

THURSDAY (17th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.).

FRIDAY (18th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London

Throat (2 P.M. and 6 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square, (9.30 A.M.).

SATURDAY (19th).—Royal Free (9 A.M. and 2 P.M.), London (2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.), Throat, Golden-square (9.30 A.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (14th).—MEDICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—8 P.M. General Meeting. 8.30 P.M. Ordinary Meeting. Address:—Dr. W. H. Allchin (President): The Responsibility of the Organism in Disease.

TUESDAY (15th).—PATHOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Dr. W. Barratt: A Case of Sylvian Aneurysm.—Dr. F. W. Andrewes: Hæmorrhagic Myositis in Enteric Fever.—Mr. C. S. Wallace: Primary Melanotic Sarcoma of Small Intestine.—Dr. Thursfield: A Case of Pleuro-œsophageal Fistula.—Mr. S. Shattock: Prehistoric Calculus. Card Specimens:—Dr. Findlayson: Agenesis of Lung.—Dr. Thursfield: (1) Cerebellar Tumour arising from Ependyma; (2) a Case of Porencephaly.

CHELSEA CLINICAL SOCIETY (Jenner Institute of Preventive Medicine, Grosvenor-road, Chelsea).—8.30 P.M. Opening Address:—Mr. C. A. Morris: Some War Sequelæ.

WEDNESDAY (16th).—ROYAL MICROSCOPICAL SOCIETY (20, Hanover-square, W.).—7.30 P.M. Mr. C. L. Curties: Exhibition of Mounted Specimens of Marine Zoological Objects. 8 P.M. Paper:—Miss A. L. Smith: The Fungi found on Germinating Farm Seeds.

THURSDAY (17th).—HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne-street, Edgware-road, W.).—8.30 P.M. Paper:—Mr. C. Williams: Hæmaturia in Childhood.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Cases:—Mr. R. Marcus Gunn: Persistent Double Keratitis, mainly superficial, without Tendency to Ulceration.—Mr. S. Stephenson: A Case of Congenital Distichiasis. Presidential Address:—Some Clinical Experiences of Primary Chronic Glaucoma and the Value of Iridectomy. Papers:—Mr. S. J. Taylor: Notes of a Case of Rodent Ulcer of the Cornea in a Child.—Mr. E. Nettleship: Chronic Serpiginous Ulcer of Cornea (Mower's Ulcer).

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (14th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Galloway: Clinique. (Skin.)

POST-GRADUATE COLLEGE (Lecture Room, West London Hospital, Hammersmith-road, W.).—5 P.M. Sir William Mac Cormac, Bart., K.C.V.O.: Opening Address.

TUESDAY (15th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Sir W. H. Broadbent: Clinique. (Medical.)

POST-GRADUATE COLLEGE (Lecture Room, West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Baldwin: Minor Surgery.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, Bloomsbury).—3.30 P.M. Dr. Tooth: Spinal Localisation.

WEDNESDAY (16th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. A. H. Tubby: Clinique. (Surgical.)

POST-GRADUATE COLLEGE (Lecture Room, West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. MacAdam Eccles: Surgical Anatomy.

LONDON THROAT HOSPITAL (204, Great Portland-street, W.).—5 P.M. Dr. Cathcart: Examination of Ear. (Post-Graduate Course.)

CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—8 P.M. Introductory Lecture:—Mr. L. Browne: The Relationship to General Medicine of the Special Diseases treated at the Hospital, also to other Diseases constituting separate Specialisms.

THURSDAY (17th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Clinique. (Surgical.)

POST-GRADUATE COLLEGE (Lecture Room, West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Dunn: Iritis.

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Still: Diarrhœa in Infants.

CHARING-CROSS HOSPITAL.—4 P.M. Mr. Waterhouse: Surgical Cases. (Post-Graduate Course.)

FRIDAY (18th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Marcus Gunn: Clinique. (Eye.)

POST-GRADUATE COLLEGE (Lecture Room, West London Hospital, Hammersmith-road, W.).—5 P.M. Dr. Saunders: Therapeutics.

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(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 10th, 1901.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind	Rain-fall	Solar Radiation in Vacuo	Maximum Temp. in Shade	Min Temp	Wet Bulb	Dry Bulb	Remarks at 8.30 A.M.
Oct. 4	29·95	S.W.	0·07	61	57	53	56	57	Raining
,, 5	29·94	S.W.	0·53	57	59	44	45	46	Fine
,, 6	29·46	W.	...	83	59	46	51	51	Stormy
,, 7	29·62	N.W.	0·22	92	54	47	44	47	Fine
,, 8	29·66	S.W.	...	64	60	44	46	48	Overcast
,, 9	29·56	N.W.	0·04	88	61	48	49	55	Cloudy
,, 10	30·19	S.W.	...	85	58	46	46	48	Hazy

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